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ST. THOMAS'S HOSPITAL.

CLINICAL LECTURE

ON THE

DIAGNOSIS, PROGNOSIS, AND TREATMENT

OF

DELIRIUM TREMENS,

(Illustrated, in part, by a Case reported at page 161),

DELIVERED BY

DR. ROOTS,

On Monday, November 2, 1835.

You may remember, gentlemen, that when I last had the pleasure of meeting you, I concluded with an avowal of my ignorance of the precise condition of the brain and nervous system in that particular disease which is called "delirium tremens."

With respect, then, to the termination of the disease. Sometimes, if the attack has been very slight, the disease will run on for three or four days, or more, the patient will fall into a profound sleep and awake comparatively well. This, however, is not a very frequent termination, when unaided by medical means. More commonly, and more especially if it be a second or a third attack, the symptoms will increase in intensity, and perhaps terminate in convulsions, of an epileptic character, occasionally, or perhaps frequently, recurring, until the patient dies; or it may terminate in apoplexy, after one or two more recurrences of these convulsive attacks. It may terminate in apoplexy, and occasionally it will terminate in mania. The latter, however, certainly is not a common termination, but still it is an occasional termination of delirium tremens.

Prognosis.—Then as regards your *prognosis*; if it be a first attack,—if the constitution has not been materially enfeebled, your prognosis may generally be favourable. Of course it becomes more doubtful in proportion to the previous shattered condition of the patient, and also more doubtful if it have been attended by convulsions. The danger, too, as a matter of course, will be increased if, in addition to the irritation, you find accompanying it inflammation.

Diagnosis.—Then as regards your *diagnosis*. This is certainly a subject of the greatest importance, because upon the correctness of your diagnosis, will depend the probability of your patient's recovery. If you should by chance mistake true delirium tremens—and I am speaking now of the *true* form of the disease,—and treat it upon the principles of inflammation of the brain, the chance is that you will destroy your patient's life. Well, then, the history of the case, the history of the patient's previous habits, whether he had been addicted to the abuse of spirituous liquors, or of opium; or if to neither of these, whether, having been exposed to great bodily privations and mental anxiety, the disease had supervened upon them. Next you must bear in mind, in true delirium tremens, the absence of the flushed countenance, the absence of the suffused eye, the absence of excessive heat of head, the tremor (the general tremor of the body, to a greater or less extent), the tremulous condition of the tongue, and also its moist creamy coat,—these things being considered in connection with the state of the pulse, which is perhaps at first rather slow and soft, speedily getting quick, but still soft; and, in addition to all these, the peculiar illusion of the mind—the illusion in true delirium tremens being perfectly different from that which is observed in inflammation of the brain. The patient here, it is true, is suffering under an abberration of mind, but it is that which is easily controlled. He gets out of bed, but is easily got back again; he is subdued with very little difficulty. This is not the case in delirium arising from inflammation. These are only intended as practical remarks for your observance, and as we have not time to go more deeply into the subject, I shall go at once to the treatment.

Treatment.—Now supposing you were called to a patient who was labouring under the early stage of delirium tremens, where there was no question whatever as to the nature of the disease. Your first object in such a case would be to ascertain that the bowels were sufficiently open; and to ensure *that* you would give him, probably, a warm

stimulating purgative, with, most probably, a small dose of calomel,—say three, four, or five grains, with two or three drachms of the tincture of senna; and if the bowels were not readily acted upon, you would give him some of the neutral salts with it. But I am quite sure you will find that *very active* purging will do no good. As a matter of course, as I have before observed, the secretions cannot be otherwise than deranged; in the existing state of the brain and nervous system, you could not expect that the secretions, under the circumstances, would be natural; and, on this account, some who have written on the disease, being aware of this depraved condition of the secretions, have strongly recommended the employment of mercury. Now I am of opinion, and that from practical observation, that it is exceedingly proper to give occasional doses of mercury, perhaps every other day, or, it may be, once in three days, for the purpose of producing the effect of what, in older times, was called an "alterative;" I think it is right to give "alterative" doses of mercury, just sufficient, perhaps, to change, in some degree, the secretions. But I do not think you would do any good,—on the contrary I am quite satified that you would do harm, by giving mercury, in *true* delirium tremens, in such quantities as should produce the *specific* effects of that medicine on the constitution. Now my reason for this is, that mercury, generally speaking, sets up, along with its specific action, irritation in the system. You have already excessive irritability of the brain and nervous system, therefore I would not give mercury in sufficient quantities to produce its specific effects, because I think its administration would be likely to increase the very irritability which I wished to subdue.

What, then, after all, is the indication in delirium tremens? Why, it is to allay the peculiar irritability of the brain and nervous system; to induce sleep, and afterwards to restore the secretions to their healthy character. Allay the irritability of the brain and nervous system, procure good sound sleep, and increase the patient's strength by giving moderate tonics, aided, perhaps, by stimulants, and the secretions will, in all likelihood, return to their healthy condition, without the necessity of employing the specific influence of mercury.

What, then, are the means by which we would endeavour to allay this irritability of the brain and nervous system, and procure sleep? You all know, gentlemen, that in irritation of the system generally, or in irritation of any particular part, no means with which we are acquainted are so powerful in allaying that irritation as *opium*. Then opium becomes, I may say, our sheet-anchor in the treatment of delirium tremens, and that must be given in doses proportioned to the degree of irritability in each particular case, and also to the power of the individual. In slight cases, small and frequently repeated doses of the tincture of opium, or of solid opium, or of the preparations of morphia, the acetate or muriate, will be sufficient; say from ten to fifteen or twenty minims in slight cases, repeated every three or every four hours, until sleep is procured. But if the irritability is great, you must then have recourse to larger doses; in which I should say that it would be useless to commence with a dose of less than forty or fifty or even sixty minims, and I should prefer the latter, if of the tincture of opium; or from three to five grains of pure opium, or from a quarter to half a grain of the muriate or the acetate of morphia, to be repeated every four hours until sleep was procured. If you find, after the patient has taken three or four doses, that the excitement still goes on,—that there is still a want of sleep, and the same degree of irritability and illusion, and perhaps without the pulse being augmented (without there being the slightest proof of inflammatory action in the brain itself, or in the membranes of the brain), and that the delirium seems to be increased instead of diminished, then I should not hesitate to give an increased dose. For example, if I had been giving half a grain of the muriate or the acetate of morphia every four hours, and after the third dose found the irritability not allayed, having waited the proper time after the exhibition of the last dose, I should then give one dose of a grain. Observe that I say, after having waited the proper time. Now my reason for saying this, for advising you always rather to commence with a small dose at first, and to wait the effects of that—to feel your way, as it were, than to commence with the boldest dose at once, is this, that though in a great many instances you will find success attend the exhibition of the larger dose, yet it has occurred to me in two instances, and it has also been related to me by one of the best practical physicians of the present day in this town, as having occurred to him also in one or two instances, that by commencing with a dose, say of a grain of the muriate or the acetate of morphia, such an impression has been made on the brain and nervous system, that the patient has never been aroused from it; knowing, therefore, that such an effect *may* take place, it becomes our duty to exhibit opium with caution. When sleep has been procured,—and when it is procured it very generally runs on for six, seven, or eight hours,—you find that your patient awakes amazingly relieved; in some instances perfectly relieved.

The caution I have just given, may, perhaps, be best illustrated, by mentioning to you the following case:—It happened that during the present summer I was requested to see, with one of the most eminent and intelligent general practitioners in this town,

a lady who had been ill for some time; and it was necessary, as a matter of course, though painful to her friends, to acquaint me with the cause which had brought her into the condition in which we saw her. She had unfortunately contracted a habit of drinking brandy. Now I found her suffering under true delirium tremens. There was the tremour, the quick pulse, and, being in an advanced stage, the tremour of the whole body, the tremour of the tongue, the profuse perspiration, the absence of pain and heat of the head, and there was the creamy moist tongue. The only symptom wanting to make up the disease appeared to me to be the illusion, which I could not detect; still I was satisfied that the disease was delirium tremens, and I was very nearly quitting the bed-side, with the impression that it was a peculiar case of delirium tremens, unaccompanied by illusion; but just as I was about to go, I said—"and so you have not slept any night for some time past; you did not sleep at all last night I suppose?" She replied, "How could I sleep? We had workmen in the house." This was the fact, for there were workmen about the house; but she went on to say, that one of them had attempted to get into her room at night, and that he was constantly at the door. "He packed up all the plate," she said, "and took it away with him. He has since been apprehended, and my husband is now at Bow Street, attending his examination." Now this was all told so deliberately, and appeared to me to be so natural a chain of events, that I thought it must be true, and turning to a female relative or friend who was standing at the foot of the bed, I said—"Is that really so?" The answer showed that there was not a word of truth in the statement, except what related to the fact of the workmen being about the house. The existence of illusion was now manifest enough, and I directed half a grain of muriate of morphia to be given every four hours, and that if, after the third dose had been exhibited, the irritability of the system was not allayed, a dose of a grain should, after waiting the proper time, be given. Two doses were given, but still the irritability remained, and in about an hour afterwards a dose of a grain was given, the united effects of which three doses were such, that the medical man was obliged to be fetched, when he was under the necessity of pouring down brandy and ammonia, and using constant friction to keep the patient in a state of agitation for a considerable time, in order to counteract the poisonous effect of the narcotic *poison*, or, as I may call it, of the narcotic, from taking effect. After this the patient did perfectly well. Still, if the medical man had not come in immediately, the chance is that she never would have recovered from the effects of the dose.

In addition to opium, cold applied to the head is another most useful remedy, either in the form of evaporating lotion, or applied in the shape of ice.

I have already stated to you my objections to mercury. I do not think that in this stage of the disease, or in this particular species of the disease, blisters are of much service, unless you imagine there is some slight degree of congestion, or of inflammatory action going on, which you are afraid to attack by depletory measures; then perhaps a blister may be used, but otherwise I should not have recourse to it.

Well, now, during this period, in conjunction with the opium, the powers may be so enfeebled and exhausted, that the exhibition of some stimulants may be proper. Now, of those, the Materia Medica presents a great variety; and you will find suggestions to give camphor, ether, ammonia, asafœtida, valerian, and a host of others; but I don't mind making the avowal to medical men, that in a case of this kind, as regards stimulants, and especially those which come under the denomination of "antispasmodics," I have but a very sorry opinion of them. I know what a moderate quantity of wine is capable of producing; I also know what may be gained by light nutritious diet, but I confess to you that I am not quite satisfied as to the quantum of stimulating effect that may be produced by five, six, or eight grains of carbonate of ammonia repeated every six, or every four, or every three hours. Or, if the quantum of stimulus be ascertained, still I am afraid you will give it at the risk of nauseating the patient's stomach, and preventing him or her from taking that which, in the way of nutriment, you ought at the same time to administer. However, there can be no objection, though I dare say there are many who think differently from me, for those who see their way more clearly with these remedies than I do, to giving moderate quantities of carbonate of ammonia, of camphor, of ether, or, if you think that it is a good stimulant, of asafœtida. I confess for myself, that I should be much more inclined, if I wanted a mere stimulant, to give some good porter, or some tolerably good ale, taking that stimulus more especially to which the patient had been previously in the habit of resorting, only giving it cautiously, and watching its effect.

The food ought, as a matter of course, as I said before, to be light and nutritious,—say milk, good strong beef-tea, animal broths, and, in some instances, where the patient's stomach will bear it, I should have no objection to allow him a mutton chop, or a slice of meat, always being careful so to graduate the exhibition of stimulants, as not to produce over-excitement; if you do that, then you will get the second species of delirium tremens; you will then have

inflammation of the brain in addition to *irritation*.

Supposing, then, that the opium has procured sleep, after having been obliged to resort to a larger dose, I would still continue the exhibition of the opium in small quantities—that is, if I had been giving it in the form of the muriate or acetate of morphia in doses of half a grain every four hours, then having afterwards resorted to one grain, in consequence of the previous small dose not having been sufficient to procure sleep, that one grain having had the desired effect,—then, after the patient had awoke, I should continue the small dose for a certain time every four hours, the object being, as soon as the irritability of the patient was sufficiently diminished, to diminish, also, the frequency of the dose of opium. This, however, must depend upon practical observation. It is quite impossible to lay down any positive rule as to when the quantity or the frequency of opium ought to be diminished. That must depend upon the degree of irritability remaining.

Next, as regards restraint. Now, if that can by possibility be avoided, it ought not to be employed. As I before observed to you, the delirium is, generally, of that peculiarly passive character which does not require forcible restraint, and where it can be avoided it ought, because it only produces increased irritation. One or two people, generally, ought to sit at the bed-side. It is quite sufficient to persuade the patient, merely leading him back to bed, instead of confining him with a strait-jacket, as the patient was obliged to be confined who was labouring under the second species of delirium tremens, and whose case I brought before you last week.

Supposing the irritability of the brain and nervous system to have been subdued by these means, it may then become necessary to resort to some mild tonic, and perhaps some of the vegetable bitters, some quinine perhaps may be best adapted for restoring general strength to the system. It becomes also a positive duty, an unpleasant one in many instances, more especially in private practice, to represent most strongly to the patient the risk he runs by again indulging in the vicious habits which brought on this disease, for in ninety-nine cases out of a hundred, it does arise from the abuse either of spirits or of opium.

Second Species of Delirium Tremens.—(Case of Grey.)—Well, then, with respect to the treatment of the second species,—that species under which Grey was labouring. Now in such a case the treatment must, to a certain extent, be of an opposite character, and, to a certain extent, ultimately, of a combined character. He had been twice bled before he came in. He was bled, properly bled, by Mr. Stone, when he came in. The next day, though satisfied when I first saw him that he was suffering under delirium tremens, yet I was equally satisfied that he was labouring under delirium tremens, accompanied by inflammation of the brain, or its membranes, or both; for I do not hesitate again to confess my inability positively to say when the brain alone is inflamed without there being any inflammation of the membranes of the brain, or when the membranes of the brain are alone inflamed without there being any actual inflammation of a portion of the brain itself. It looks very well on paper to make those distinctions, but you will find it difficult enough to make them when you come to practise. Satisfied, then, that this inflammation existed, and that a sufficient or nearly a sufficient quantity of blood had been taken, and that it would not be prudent to risk general depletion further, I did not hesitate at that time (continuing cold to the head) to direct further local depletion by taking eight ounces of blood from the occiput, and at once giving him after that (in conjunction with the mercury,—Mr. Stone having ordered him three grains of calomel every six hours, and which I then directed every four hours) half a grain of the muriate of morphia, every four hours. You saw the result of this. After the second dose of the muriate of morphia, his delirium diminished, and he obtained three hours and a half of sleep. When I saw him the next day, there appeared to be still sufficient proof of excitement about the brain or its membranes to warrant a further abstraction of blood, although I continued the muriate of morphia, and eight ounces more, therefore, were taken from the occiput. After this no further depletion, either general or local, was necessary. He went on for two or three days progressively amending; and now I come to an error in my own practice. Finding so much amendment, I was willing to diminish the frequency of the exhibition of the muriate of morphia, and as he answered perfectly rationally, as there was no proof then of any inflammatory action about his head, as the tremour was lessened, and, in point of fact, as he was in every respect better, I said, "Give the muriate of morphia every eight hours instead of every four." Well, now, what was the consequence? Why, that within four-and-twenty hours after that, his delirium increased; he became almost unmanageable. Mr. Stone was called to him, and very properly gave him a grain of the muriate of morphia, which quieted him, and he went to sleep. This medicine was then resumed in doses of half a grain every four hours, and continued for a sufficient length of time wholly to subdue the irritability of the brain and nervous system, after which it was discontinued without any recurrence of the delirium. Now you may profit as

much by bad practice as by good. I candidly admit, that I ought there to have continued the muriate of morphia a day or two longer, as frequently as it was given before. You will observe, too, that here was another modification of the treatment, because with the exhibition of the opium, which is not proper, if you have merely inflammation of the brain or inflammation of the membranes, it was necessary, and speedily too. to give him some good beef tea, and in addition to the beef tea it was necessary to give him some stimulant. I confess that I did not here have recourse to musk, camphor, ammonia, or asafœtida, but to a small quantity of porter, which he bore very well, that is, his brain and nervous system bore it well, but it was not agreeable to his taste, therefore in the course of a day or two it was changed to a small quantity of wine; the wine also he did not like, and that was changed, ultimately, to a small quantity of brandy, a tablespoonful twice in the course of the four-and-twenty hours, properly diluted with sago, arrow-root, or gruel.

With respect to the exhibition of mercury, you remember that I stated to you, that in the treatment of the true disease, I myself did not believe it to be necessary, or that it would be advantageous, to give mercury so as to produce its specific effects upon the system, and I gave my reason for so thinking; but still mercury was given here. But then, here were two diseases; there was *inflammation of the brain* supervening on *delirium tremens*, and the mercury was given on the principle of its being one of the best adjuncts which can be employed in conjunction with depletion, general or local, in diminishing inflammatory action in any of the tissues of the body, excepting the mucous membrane of the bowels; that is, in my opinion; but here it was given—and I think it is probable that I should have given it myself—twenty-four hours before I saw the patient. I say I *think* I should have given it myself. Still you are to remember what it eventually did. It set up excessive irritation in the mucous membrane of the bowels, so that we had a harassing diarrhœa, which we were obliged to combat with astringents and doses of opium, even after the irritability of the brain and nervous system had so far subsided as to render the further exhibition of morphia unnecessary. Nay more, the mercury went on to produce something beyond irritation; so I presume, from the nature of the discharges from the bowels. Certainly there was a degree of inflammatory action set up, and this was evident from the discharges, from the tenderness along the track of the colon, and from the increased heat there, so that we had to apply leeches, and, subsequently, a blister, after he was convalescent, from the delirium tremens. This is undoubtedly an effect of mercury, which cannot always be avoided, though an effect which one does not desire, where the patient has been suffering under such a disease as that upon which I am now making my observations.

It has been suggested by some practitioners that antimony might be of service in delirium tremens, given in large doses. Upon that I have no right to offer any observation, because I have never seen the practice carried into effect; but I may take the liberty of stating what my idea is on the subject. I think that if useful at all, it can only be useful in the second species of delirium tremens, namely, that which is accompanied by inflammatory action; and that as, very frequently, the stomach in delirium tremens is so irritable as to make it an object with us to tranquillize that organ very speedily, I certainly cannot imagine antimony to be useful in the true delirium tremens. I should hesitate very much before I employed it in the second form of the disease.

It has also been stated that digitalis has been given with advantage, I think by an American physician; I am not quite certain whether it has been employed in this country; but it has been said to have been used, and in doses which excite at least my surprise,—in doses of a drachm,—of sixty minims every two, three, or four hours, frequently repeated. I only mention that such facts have been brought before the public. They may be true, but I am quite satisfied that I never should have felt warranted in employing such a remedy in most of the cases of delirium tremens which it has been my chance to meet with.

I stated to you that it was exceedingly necessary to form your diagnosis correctly with respect to delirium tremens, so as to discriminate the true delirium tremens; and it has just occurred to me that I did not allude to one circumstance which should have been mentioned. If perchance you mistake true delirium tremens, in a very shattered constitution, for inflammation of the brain, and treat it as inflammation of the brain, I stated that you will most probably lose your patient. Now, I saw an instance of that some fifteen or sixteen years ago. The case was one of a butcher, who had drunk exceedingly hard, and there was a consultation of three medical men upon his case. Of course I had not then the same degree of experience that I may be supposed to have now, but still it appeared to me to be decidedly a case of delirium tremns, and as such it was proposed to treat it. A difference of opinion, however, existed as to the remedies, and so satisfied was one individual in consultation as to his view of the matter, that he said we should certainly destroy the patient if blood was not abstracted, either generally or locally. The juniors bowed to the senior authority,

and twelve ounces of blood were directed to be taken from the occiput. Immediately upon removing the glasses the man fell into convulsions and died. Now I do not think that that result would have happened if this depletory measure had not been adopted. It might. It is impossible to say that it might not. He had not previously suffered convulsions; but I do think that the fatal termination would not have happened had the blood not been abstracted.

I am anxious, gentlemen, to recal your attention, to prevent misapprehension, to one part of the case of this man Grey. I mentioned to you that the medical gentleman who had seen him before he came into the hospital had very properly directed his feet to be put into warm water, and I added that they had indeed been put into warm water,—that they had been put into boiling water; and I am anxious just to recal the fact to your minds for the purpose of now saying that this immersion was not the act of the medical gentleman who saw him, but an error of the friends of the patient, or the people about him. The medical gentleman had no kind of intention of putting his feet into boiling water. It was the error of others, not of him.

I was about to call your attention to two cases of gastric affection that have occurred in the hospital,—one a well-marked case of chronic gastritis, and treated as such; the other of gastric irritation—one, at least, which I myself believe was not at all of an inflammatory character, though it was thought right in, some measure, at first to treat it as though it were; but as it only wants five minutes of the hour, it would be absurd now to enter into a consideration of two cases which are of considerable interest, and therefore they will occupy our time at our next meeting.

*** In the lecture by Dr. Roots, published on the 31st ult., the suggestion of the term "delirium cum tremore" was, through misapprehension, ascribed to Dr. Copland, in whose "Dictionary of Practical Medicine" the term is, we believe, applied to the disease commonly called "delirium tremens." The name, however, was first employed by Dr. Elliotson in the following passage, which we extract from a lecture delivered by that gentleman in 1831:—"The disease to which I allude is called *delirium tremens*, which is rather an improper word, because the delirium cannot tremble. It would be better to say *delirium cum tremore*," &c.—Ed. L.

MIDDLESEX HOSPITAL.

CLINICAL LECTURE

ON CASES OF

DISEASE OF THE SPINE,

DELIVERED BY

SIR CHARLES BELL,

On Tuesday, November 3rd, 1835.

I EXCEEDINGLY regret, gentlemen, that you are occupied so constantly,—from morning to noon, and from "noon to dewy eve,"—attending lecture after lecture on medical subjects. It is hardly possible, under these circumstances, to be a usefully diligent student, for you are apt, amidst the perplexities, to forget the great object for which you have come to London, which is to pursue the study of anatomy and surgery,—two points that will ever be well taught in London alone. A gentleman once rose in the House of Commons, and declaimed with great emotion about the danger to which his Majesty's liege subjects were liable, of being poisoned in consequence of the ignorance of boys in apothecaries' shops; when another member rose and said, that they managed those things better in Germany. And so a certain class of members of Parliament take up the matter, the Government being always glad to see the House of Commons occupied on a subject in which they incur no personal responsibility. The present principles of medical education have gone on developing themselves, until all the birds of the air have given to the Apothecaries of London, the power of deciding what lectures students shall attend, and the studies they shall pursue, and the result is, that a system prevails under which no individual can do much; for it is requisite, in order to accomplish the curriculum, that the lectures which you attend should be so multiplied as to keep you on the move, with hardly an interval of time between them, from one theatre or one lecturer to another, until one is put in mind of Matthews's account of the sweepstakes, where the horses are all neck and neck together, and all come to the goal at once.

Well, now, you must consider it my duty, if I am so unfortunate as to be against Companies of Apothecaries, Colleges of Physicians, Councils of Surgeons, and Parliament to boot, to remind you, that your great duty in London is to study that which you can learn thoroughly nowhere else, namely, anatomy, with its various applications to pathology and the practice of surgery.

I apprehend that I shall be able, in the present session, to address you with pecu-

liar advantage. I formerly gave my time unwillingly to the delivery of clinical lectures, because when I looked around, I found that the pupils before me belonged to three or four different schools, with no ideas common to us all,—with no principles such as I could conceive to be correct, and, therefore, with no possibility on my part of being usefully employed in commenting on the progress of cases. Now, however, the case is different, of which I will give an example. Supposing that you were to go into Clayton's ward, where there is a man lying with a wandering mind and a bewildered stare, a very pale face, and a deep-coloured extravasation around the eyes, and grumous blood issuing from the ears. This man has fallen on the top of his head, and were I to enter upon the case in the hearing of those who were uninitiated in the doctrines delivered here, I should be obliged to describe the whole structure of the head, and the principles of the entire machinery on which the skull is built. But now, in half a sentence, I can say,—There is an example of the case of which I speak. There is a man with a blow received upon the upper part of the parietal bone, the effect of which is visible on the temporal bone, and in the ear. Or here, again, is a man lying with a fissure in the base of the skull. Would it not be necessary, in lecturing upon such a case, that I should go into the whole anatomical relations of the fissure. I should merely need to say, that here is an illustration of such and such facts, or principles, as I had endeavoured on a former occasion to inculcate. The same thing would avail me in a case of fracture of the humerus near its head, for instance, of which we have an example. On such an occasion I need hardly speak of the necessity of particular appliances in the treatment, such as saying, that if the lower part of the bone be not properly disposed, such and such effects will be produced by the pectoralis major and other muscles. One word will now be sufficient for those who are properly initiated, as I shall take them to be, in anatomical demonstration.

After this preface I shall beg your attention to some diseases of the spine, principally taking up that which is termed "lateral curvature." There is, amongst others in the hospital, a case of extreme curvature, with scrofulous caries of the bodies of the vertebræ; there is also a case of inflammation and scrofulous disease going on in the upper vertebræ of the spine; there is a case of irritation and spasmodic affection of the sterno-cleido-mastoideus; there is a case of permanent rigidity of the sterno-cleido-mastoideus, and a case of distortion affecting the position of the head and shoulders. There could not be a better series of cases of spinal disorder for you to study by way of preparation for practice.

I shall take advantage of the dresser's book to read an account of the cases. The first is that of Elizabeth Millross, who was admitted so far back as April the 23rd, an indolent girl, who, like many other indolent girls, is the subject of curvature of the spine. The distortion became evident from the circumstance,—remarked by her parents,—of an awkwardness in her gait, and they now conceive that the right shoulder is "out," and so, indeed, when you take off her clothes, and expose the back, you find that the right shoulder is very prominent, that the scapula is elevated,—that there is great protuberance of the ribs and scapula. The "shoulder" in this case is not at all to blame,—but there is expansion of the ribs on the left side, in consequence of a curvature in the spine, below there is another curvature, forming the spine into the shape of an italic *S*, the cause of which is to be found in the following manner: — An indolent and weak girl, with a constitution disordered by the first attacks of uterine irritation, experiences a pain in the back, and suffers great weakness and languor. To relieve herself from the pain and debility, she "hangs," as they express it in the North, "upon the strong foot,"—that is, the right one, and eases the left one, the result of which is, the twisting of the spine to the right side, and the tendency to curve the whole body in a corresponding direction, but as this cannot take place, it begins to poise itself, producing a second curve in the spine, which second curve throws out the ribs. Here is an instance in a poor girl who died in this hospital from disease produced under these circumstances. The spine is seen to be first inclined to the left side, and then to the right, forming a curve the convexity of which is towards the right side, and the concavity towards the left. Thus the left ribs are drawn together, and, while the whole mass of the thorax is diminished, the right shoulder is thrown out. You thus perceive also how there comes to be an inequality in the shape and position of the pelvis,—the cause there is for the mother or the instructress to observe deformity in that part. All this is the mere result of a defective constitution,—of a constitution irritated by the first changes in the uterus, thus operating, chiefly, in consequence of habits of indolence, —from the want of that activity which I need hardly remark is essential to the strength and perfection of structure. You have an excellent opportunity of observing the truth of this in bones while they are recent. The spine consists not only of bone, but of cartilage and ligaments, with muscles going from point to point. Now the bones do not grow by themselves, nor do cartilage, ligaments, and muscles, but they all belong to one constitution, and fail or become perfect together. Therefore it is quite wrong to talk of an affection of the spine being peculiar to the vertebral bones, or to the muscles, or

the ligaments. The whole substance of the spine in such cases is debilitated, that action which is the great stimulus to its perfection having been wanting during the period of its growth. Hence the basis of health in these parts is activity, and that activity should be directed so as to counteract any tendency to curve in the spine. It must, however, be recollected, that you cannot bend the spine as you would a twig. You must persevere gradually in your attempts to make it grow in a right direction.

The next case to which I shall call your attention is that of Ann Hutchins, ætat. 20, who was admitted on the 9th of September, stating, that about a year and a half ago she was affected with pain and weakness in the loins, after which she lost the entire use of her lower extremities, and soon after was admitted into the *Salisbury Infirmary*, where she continued for six weeks, during which period various remedies were administered for her relief, issues amongst other means being applied on each side of the affected part of the back, but without producing any advantage. At present there is very little pain, and she is comparatively easy when in the recumbent posture, but when made to sit up, she complains of a sense of weight and weakness in the back. Her lower extremities have lost all power of voluntary motion, but sensation is not entirely gone. At one time she had great difficulty in passing her urine, but now that symptom is much relieved. On examining the spine there is a projection backwards of some of the last dorsal vertebræ. The catamenia appeared when she was first affected, and have not occurred since. Her general appearance (says the report) is that of a person in good health. When the extremities are moved, it is apparently without her knowledge. There is no relaxation in the abdominal muscles, no bagging of the belly, and she can tell when her feet are cold, or when cold is applied to the extremities.

Here you have the brief relation of a case of scrofulous caries of the vertebræ, with acute curve of the vertebral column. The first point to arrest your attention in this case is, the formidable contrast which is afforded in it at least to the constitutional weakness, or predisposition to the disease, which existed in the other patient. The disease here is not actually formed in what may be called a vital part. The bones of the vertebræ, especially, are of a spongy and light texture, and are proportionably liable to become the subjects of scrofulous inflammation. There is some little debate among pathologists whether the disease of the spine in these cases commences in the ligaments, in the inter-vertebral substance, —or in the bodies of the vertebræ. On dissection we find that all are affected, and it is a vain speculation to endeavour to determine which of the parts is primarily affected. We know that the bones, the ligaments, and the cartilage, are the parts of the body most liable to scrofulous action, and in this part they are more intricately combined than elsewhere. It is stated in the history of the case that she had experienced a wrench in the back, or, at any rate, that she had been in the habit of raising heavy weights. Now it is very possible that this may have been the origin of the disease, though I do not quite agree with my friend the dresser, that the patient appears healthy. On the contrary, I should say that a distinctly scrofulous diathesis is marked in her appearance. However, this girl may, by raising weights, thus have given origin to the disease.

Here now is an illustration of the advantage of a (concentrated) school. I am able to produce you a specimen of lateral distortion of the spine, not exactly resembling the last case, but presenting an acute projection, directly backwards, formed by the wasting, ulceration, and absorption, of some of the vertebræ. Pray let this specimen make a due impression on your minds. When these facts are placed before you, I need hardly point out what is the great doctrine for practice which the opportunity of observing them points out. But to return to the case. I stated that there was pain in the loins, and this is a remarkable circumstance; yet it is one which I observe in all these cases, and the reason of it is apparent. The power of motion is entirely gone in the lower extremities, but sensation is only partially affected in them. Sometimes, however, it is entirely absent. On referring to the spinal marrow, you will find that the nerves of motion are so directed, in issuing out from the chord towards the bodies of the vertebræ —that should inflammation take place in the bodies of the vertebræ, it must affect the motor nerves at an earlier period, and to a greater extent, than those of sensation. We observe the fact, and this is the explanation that I give of its occurrence. The circumstance leads to another question. There are persons in London who profess to cure diseases of the spine, and who ridicule the regular surgeon for not attempting and effecting the cure of scrofulous caries of the vertebræ. These spine doctors "cure" the disease by raising the body and stretching the spine. Now does this suggestion offer or not a very important remedy to our notice? Ought you to adopt the same plan in similar cases? It is true that you may lead the patient to believe that you can usefully extend the length of the patient some inches, and having done so, you may support the body at that length by an iron case. But what more do you do? You actually raise the surface of one diseased vertebra from the surface of another. The ligaments are already pretty well destroyed. You know very well that inflammation loosens the whole of the ligaments, and allows of this

separation of the vertebræ, and there is actual caries destroying one after another of the vertebræ. Then of what use is extension of the body? I know that it is quite possible to stretch these persons, to raise them up; but what can you expect to follow that raising? There is a large gap, a vast hiatus, between the upper and the lower parts of the diseased bones, so that anchylosis cannot possibly take place between them, although it is to that very process that you must look for the union of the vertebræ, and the mending of the diseased spine. Unless then the parts be kept perfectly at rest, and in apposition, how is it possible that we can expect a cure, knowing for a certainty that a cure never did take place in any of these cases, except through the process of anchylosis? Besides the prevention of this cure, there is also the danger,—though this may be only a speculative suggestion,—of a falling down again after it is raised, and support is removed. I look with horror on the consequences of such a fall after the bones have been thus upraised by mechanical means tending to separate them. The effect of a sudden fall would be not only a new curvature, but an injury of the spinal marrow itself. What then does this quackery mean? It must be productive of great harm if the disease have not proceeded to anchylosis, though it may do *some* good when anchylosis has taken place, by twisting and moulding the upper and lower parts of the body, so as to accommodate them to the fixed position of the anchylosed portion of the column. That is all which these quacks can effect. But suppose a person to labour under this disease, the inflammation to have subsided, the anchylosis to take place, the whole mass, by the solidification of anchylosis, to be strengthened, and the quack then to begin his forcible process of stretching, hoping to do no harm by it, but endeavouring only to cause the upper and lower parts to accommodate themselves to this permanent curvature; even then it should be remarked that he goes to work with the danger of breaking up the long-established connection of the bones, or tearing asunder that union which is not yet bone but only ligament. Thus you perceive that the preliminary cure requires a state of perfect rest. On looking round the hospital, you will see hundreds of instances of disease in which I am sure I do not exaggerate, when I say that motion alone is keeping up the disease of the patient. It is so in all the joints, it is so in ulcers, which occasion so much trouble, and it is so in diseases of the spine. So long as a person moves and twists about, there can be no change of the extremities without a corresponding change in the centre, and as there is thus an incessant source of irritation kept up by the motion of the parts diverging from that centre, it is your business to keep the patient in the horizontal posture, and to have the mattress so moulded to the projection of the spine, that the latter can sink into the former without injury. The patient must be so guarded, that if she moves at all, there should be no motion in the inflamed parts.

The next point for consideration is the treatment by counter-irritation, which it is asserted by some persons does no good, though I am unwilling to admit the correctness of that denial. Counter-irritation by issues may be beneficial, but the greatest portion of benefit is to be derived by attending to the origin of the disease, the defects in the constitution of the patient, and endeavouring to rally its powers to get rid of the cause.

Before I quit this subject, I must make one further remark, because I have seen it stated in a book, that there are no diseases which present a greater variety of forms than affections of the spine. This seems to me to be a very extraordinary statement; but I know how it happens; it results from persons mistaking a sympathetic affection for the real disease. When there is actual caries of the vertebræ, and an actual falling forward of the spine, the symptoms may vary in consequence of the inflammation reaching to the spinal marrow itself, or it may be attended with more or less pain, and there may be more or less paralysis. But people class together fifty different affections under the head of caries or disease of the spine. I do not, after all, however, so much wonder at this, for I can assure you that there is nothing more difficult than the diagnosis where the spine is affected. There is a languid girl, for instance, who, when she walks, has great pain in the loins, and a suspicion arises that some disease exists in the spine. You strip her, examine her, and feel down each process of the vertebræ; you come to a particular spot where there is acute pain, and you say, "Do not deceive yourself; are you *sure* that there is pain at this part?" She will repeat that she positively feels pain in that particular spinous process. Here, then, is an injury, but it is not the disease itself. The principal source of derangement, in by far the greater number of such cases, is uterine irritation. If you place her on her back, and confine her to that posture for months, you ruin the constitution. You are just doing that which excludes all hope of amendment, for amendment depends on exercise and freedom of air,—on the restoration of constitutional strength, and the return of the uterine functions. By following a course of practice not indicated by the disordered *uterine* action and the pain in the back, as sympathetic of the original disease, you devote the poor creature to a condition in which she lies without a chance of improve-

ment. I have raised up at least twenty young women out of this condition, when they had been from eight to sixteen months in the horizontal posture,—not labouring under disease of the spine at all, but merely suffering from sympathetic pain there, arising from other internal disorder. The original cause is sometimes in the bowels; it may be in many other of the viscera; affections even of the lungs will produce it; affections of the heart will occasion pain in the spine. Pain in the mammæ, or disorder in the colon, or disease of the uterus,—all these are pregnant sources of error, producing the very symptoms which may be mistaken for carious disease of the bones of the vertebræ. These are very different cases from those in which I have before described rest to be essential to the cure.

Another case in the hospital is that of Mary Blaymer, ætat. sixteen years, who was admitted on the 6th of October, on account of a distortion of the upper vertebræ of the neck, which throws her head towards the left shoulder. There is a tumour, extending from the occiput, of five fingers' breadth, down the spine. The third and fourth vertebræ project, but they are only obscurely felt to do so, in consequence of inflammation and hardness of the tissue surrounding the vertebræ, and occupying all the upper and back part of the neck. She cannot turn her head without pain, and the chief motion takes place at about the fifth cervical vertebra; that is, when she attempts to move the head, she turns it on probably the fifth vertebra of the neck, all the upper part of the spine being consolidated. An example of this disease is now on the table, and here is also another specimen, proving what an extraordinary defect may exist in the upper vertebræ. In the summer, says the report, she had rheumatic fever, which continued for four months, and on getting better this swelling began. She has no weakness of the arms and fingers, and never had: there is occasionally a difficulty of swallowing, or, rather, she has had that difficulty, for it is now removed. She herself attributes the difficulty of swallowing to tension caused by the pressure of the tumour. There is an issue in the neck, and she has taken liquor potassæ, and aqua calcis. Her head is more upright now than when she came into the hospital.

The first reflection that I shall make on this case relates to the long-continued fever. On inquiring into these cases of affection of the spine, you find, for the most part, that it is such long-continued fevers and long confinement that produce this scrofulous diathesis. A course of mercury will produce the same effect. In fact, whatever reduces the power of the constitution below par, will render the patient liable to scrofulous action, from a slight injury done to any of those parts, which, I repeat, are particularly liable to disease. This case no doubt must appear more formidable to you than the last. Inflammation in the spinal marrow is serious enough; but inflammation in the medulla oblongata, or pressure upon it, must produce instant death. There have been in the hospital some melancholy cases of sudden death resulting from fracture of the spine, and a giving way of the upper vertebræ. It is alarming to find the vertebræ so diseased as you perceive them to be in this case, for the ligaments must also partake of the disease, and therefore the bones are particularly liable to displacement. If a wrench of the neck or a displacement of the vertebræ occurs, the medulla oblongata becomes nipped, and instant death ensues. If pressure be made there,—that part of the nervous chord being the source of all the nerves of respiration—not a word is afterwards spoken, not a breath more is drawn, but death as instantly follows as if an animal had been "pithed."

We cannot, therefore, avoid being alarmed on perceiving such a mass of disease around the upper part of this patient's spine. At the same time, however, it is obvious that there is some interposition between life and the fatal event. It somewhat resembles the disease called "pole-evil" in the horse. There are ligaments connecting the horse's head to the thigh and bursa, and when he is reined up suddenly he is very liable to injure the union of the head with the spine; but, luckily, this occurs not in internal but in external parts, and gives rise to a swelling, abscess, and suppuration. This is a scrofulous disease in the pole of the horse, and I apprehend that the same kind of scrofulous disease may be set up in the human neck, by a sudden wrench, followed, perhaps, by anchylosis of the vertebræ. The disease happens, in such case, externally to the theca, which, you will remember, is very thick. You remember the ligamentum infundibuliformis, the powerful ligament, which, like a funnel, runs down from the dura-mater and occiput to the spinal marrow. It is that which affords protection in this case, and allows the girl to move her head about with a degree of fearlessness which would otherwise make me shudder to see her move at all.

As to the cure of the case, it must be conducted by paying attention to the constant fixing of the part, preventing all lateral motion, and inculcating upon the patient the necessity of avoiding all acts of violence. I hope that if this advice be attended to, time will solder the parts together, producing anchylosis, and that the girl will then be safe as regards her life; but she will, of course, by this, lose all motion of the neck, except the imperfect substitution of motion effected at the lower part of the cervical vertebræ.

I make these remarks preparatory to the

notice of a case which I believe will prove a source of much interest to you,—that in which a woman has an affection of the sterno-cleido mastoideus, which is a very peculiar disease, of which I have seen a great deal; and this again will lead to the mention of another case, in which there is permanent rigidity of the sterno-cleido mastoideus. I shall speak of these patients on another day, and then advert to some interesting cases of disease of the face.

ST. GEORGE'S HOSPITAL.

CLINICAL LECTURE

ON CASES OF

DISEASE OF THE HEART, DISEASE OF THE LIVER, CONTINUED FEVER, AND PALSY,

DELIVERED BY

DR. SEYMOUR,

On Saturday, October 31, 1835.

I HAVE very little to say to you, gentlemen, this afternoon. The fact is that the greater number of cases which remain for me to notice are getting well, and I have spoken of almost all of them to you in the progress of recovery; however, I shall allude to them in their present state, and then I shall speak of those cases of palsy which are in the house, the only cases of any great interest at present here, the others being in a progressive state of convalescence.

OSSIFICATION OF VALVES OF THE HEART (?)—There is a man of the name of Shepherd, of whom I spoke to you last, and who, according to my idea,—but any body may be wrong,—according to *my* idea, is labouring under a degree of ossification of the valves of the left side of the heart, without increased size of the heart, and unattended with dropsy, but it is sufficiently diseased to prevent the proper return of the blood from the lungs to the heart; hence there is extravasation of fluid into the chest, and a very irregular pulse, partly dependent on the state of the valvular apparatus, and partly on the necessary irregularities of the action of the heart in forcing on the fluid. He has been treated for inflammatory disease, which I am satisfied never existed. He is an old man. He had all the symptoms of fluid in the chest,—difficulty of breathing in lying down,—irregularity of pulse, startings in his sleep, blueness of the lips (indicating an irregularity in the circulation), and all this without dropsy in other parts of the body; proving that the obstruction, whatever it was, was partial, and acted more on the circulation of the blood through the lungs, than on its circulation in the other parts of the body. The blood was freely brought to the right side of the heart, but impeded in its progress to the left side of the heart. I put him on low diet, and gave the infusion of digitalis, with the oxymuriate of mercury, and the tincture of cantharides. He has made, ever since, a large quantity of water—two quarts, or more, in the course of the four-and-twenty hours. The consequence is that the startings in his sleep have been diminished—are gone, in fact; he sleeps quietly; the pulse is losing a great portion of its irregularity, is becoming full, is 84 in a minute, and the man expresses himself as being well. The *prognosis* in this case is dangerous. If the cause remain which produced the effusion into the chest, the patient will probably die suddenly.

ENLARGEMENT OF THE HEART, DILATATION OF ITS CAVITIES, ADHESION OF THE PERICARDIUM (?) FOLLOWING RHEUMATISM, WITH RENAL DISEASE.—Going, then, from that ward into Cambridge ward, there is a man of the name of Foster, who labours under dropsy—enlargement of the heart, with apparent dilatation of its cavities, and adhesion of the pericardium. He had been subject to rheumatic inflammation, which has produced the pathological condition of the heart—the uniform condition which accompanies this disease in general—the pericardium adhering to the heart. Two years elapsed from the rheumatic attack, without his suffering any inconvenience. The heart then began to dilate, and at present it is quite clear that it is so much dilated, that the valvular apparatus of the heart on the left side does not meet and fully close the cavity; hence the blood is forced out somewhat irregularly,—in gushes, as it were, and in larger streams. The pulse is larger, in this particular case, on this side of the heart than it usually is, because the valves are not closed; at least that is my explanation of it; there may be a more scientific one, but that is *my* explanation, and I am only here to teach you my own views.

The remedies employed in this case had the effect of getting rid entirely of the water. He was treated with calomel and opium in the first instance, with a view to diminish any inflammatory action that might be going on in the pericardium. He had some return of rheumatic inflammation, and he was bled. His mouth became a little sore, and I ordered him to take the nitre draught, two or three times a day, with ten drops of the tincture of squills, and a grain of opium at bedtime. The urine was not increased in quantity, and he was then ordered to rub in the squills, in ointment, which is the plan

I am now adopting in some cases, and which has appeared to me, in more cases than one, to be effectual. On the 26th he voided five quarts of urine in two days. On the 27th the anasarcous appearance had disappeared. To-day there is doubt whether there is any fluid remaining at all. The heart is permanently diseased, and, consequently the prognosis is unfavourable. It does, however, occasionally, happen, that after having got rid of the fluid, and having reduced, in some degree, the inflammatory action, the patient does well, and goes on without feeling much inconvenience. At all events these are chronic cases, and admitting of great relief. This patient likewise labours under disease of the kidneys; the urine coagulates very strongly—another unfavourable prognosis. He is not able to retain his water for any length of time.

Hypertrophy of the Heart (?)—A patient of the name of Ingram also labours under disease of the heart, but in a different way. He does not appear to have suffered from rheumatism, and his case is called, according to the language of the day—I will not say the *jargon* of the day, from fear of giving offence to any body,—but according to the *language* of the day, "hypertrophy of the heart." The heart appears to be enlarged, and the walls are greater in proportion than its cavities; and it is in this way that secretion is produced and dropsy takes place. This patient's case is the reverse, in some respects, of what we saw before,—both, however, labouring under disease affecting the valves of the heart,—the one with an increased, and the other with a diminished flow of blood through them; and, consequently, in the one the pulse is small, the converse of that in which a large quantity of blood is sent out from the heart. The same thing, as to the small stream of blood to the vessels, takes place, where any obstacle to the circulation arises, as in aneurysm of the great vessels; more particularly where it appears to be aneurysm at the bifurcation of the aorta. In all those cases the disturbance in the chest is very great. I have often quoted to you, you will recollect, the case of a little boy who died here of rheumatic pericarditis, with an enormously enlarged heart. He had been four or five years the subject of the disease. He had various paroxysms before his death, and you could hear his heart beat as you went up stairs; but the pulse in that boy was always remarkably small. His heart occupied more than a third of the chest, and yet the pulse was so weak that it could not, or could scarcely, be felt. When he died, that was easily explained. The aorta had not grown from his infancy, and the heart had enlarged ten times beyond its natural size. The same effect occurs here from disease of the semilunar valves.

However, this man's mouth became very sore from the mercury, which had the effect of getting rid of the dropsy, and I think the heart beats with less violence. To-day I ordered him a slight diuretic, combined with a little tonic medicine.

Disease of the Liver (with Abscess?)—There is the case of a person of the name of Mills, in York Ward, which has excited considerable interest. He had laboured under inflammation of the liver, and was attacked with pain just where the lungs and diaphragm meet; he had a short dry cough, with occasional shiverings and sweats; and I was induced to look upon it as inflammation of the liver, with suppuration. Since coming into the house he has lost the pain in his side entirely; he gets better sleep, and, by giving him small doses of magnesia, and sulphate of magnesia, his stomach and bowels have been restored to a healthy state, and his tongue looks a great deal better, but he still labours under a severe cough. To-day he has spit up a little puriform matter. Of course if there has been inflammation of the lower portion of the lung, in consequence of inflammation in the neighbourhood, there must have been some effusion of fluid into the substance of the lung, which would not get well without his spitting up a considerable quantity of mucus; but I still look upon the disease of the lung as altogether secondary; however, as the pulse was quick and rather sharp, I have ordered some blood to be taken, that we may see how far inflammatory action is or is not going on in this part, and, if necessary, to continue the bleeding, watching him. If there be disease of the liver with abscess, as I have supposed, it is of the posterior part of the liver, where you cannot get at it by puncture: but, on the whole, the man's general health is much improved.

Common continued Fever, with Ulceration of the small Intestines.—Among the female patients there is scarcely any that I shall have occasion to speak of. There is a little girl on the left-hand side in Queen's Ward, whose case is of great interest, because it affords an instance of disease which at present exists to some extent,—which, indeed, is almost always falling under the care of the practitioner, and which has proceeded very well under the ordinary treatment. It is a case of common continued fever, which is always remittent in this country, and which is attended with ulceration of the small intestines. I spoke to you of this case, you may remember, at length, when it came in. She had had much delirium. Sometimes one side of the face was very hot, and the

other was very cold. The abdomen was tender to the touch. The stools were very much like water in which cabbage had been boiled, leaving a deposit at the bottom of the vessel of a glistening appearance, something like metallic antimony. This was attended with very great inflammation of the bowels. The practice was to give her five grains of Dover's powder, and five grains of hydrarg. cum creta, three times a day, and enough of beef tea to support her strength. Dr. HOPE saw her and recommended a blister to the abdomen, which is very good treatment, and castor oil every other morning. Under this very simple treatment, the efficacy of which I can speak to in dozens of cases, the patient is entirely convalescent. But there is always fear of relapse in these cases.

Let us see what is the pathological state of the case. The glandular structure of the intestines, which is always pouring out fluid, partly to shield the bowels from obnoxious matter, and partly consisting of matter which is to be thrown out in the stools, is very extensively diseased. Of course, where it is very largely diseased, there is a constant thin and sanious discharge from the ulcerations. I am talking no romance to you. I have seen those cases of ulceration of the bowels over and over again.

Well, what is the method of cure? Of course you can do nothing in a hurry. You must induce a healthy action of the excoriated surface, and that is done by exhibiting alterative medicine, of a soothing and oily property, which helps to move the bowels at the same time. This is the *modus operandi* of the medicine, and the philosophy of the treatment. We owe a great deal of our knowledge upon this subject to the pertinacity of the French. They certainly overdid the subject, but we improved upon their treatment, and there is much credit due to them.

As the disease advances, however, this may happen. The ulcerations may be more extensive in one part than in another. They may now and then become very deep, and suddenly ulcerate through. I have seen more cases than one of that sort. There was a patient up-stairs, in whom symptoms of this sort came on. Violent sickness occurred on the preceding day; one of those ulcerations penetrated through the peritoneal coat, inflammation of the peritoneum came on, and the patient died, rapidly, from extensive inflammation. You have always to fear some accident of this sort. It is very remote; it may not happen in one case in fifty; but still it may happen. Another thing may happen. The patient may be better, may be going about, may be taking food, and then get worse again. What is the explanation of this? Why that the ulceration of the bowels was in a progressive state of healing, but the process of cure had not been carried far enough, when something obnoxious was taken into the stomach and bowels, and then the vital parts became more affected than they were in the first instance. There is more heat of skin, more sinking, and the patient is worse than ever. What you have to do in that case is, to endeavour, as far as you can, to cure the disease, and to support the strength at the same time. Here wine may be given, and even nourishing food, with great advantage. Sometimes if the bowels are exceedingly irritable, it is necessary for a time to give injections of starch and opium. Always give castor oil, moderated, as to the dose, according to the necessity of the case. You may give from a tablespoonful to half an ounce, or six drachms. Remember that in women, when they are the subjects of such disease, they are very greatly distressed, because the frame and nervous state of women are more easily excited than those of the other sex, and you must with them, probably, resort to musk and camphor. Some will perhaps say that this is an inflammatory disease, and that you are ordering stimulants. Well, but you are to keep in mind what you are to do. It may be true that you are for the time supporting a very serious injury to a part at a distance, but then you are not relaxing your efforts to cure the disease. I have dilated upon this more than perhaps I otherwise should have done, because at this time there are a great number of such cases, and I am quite sure, from my experience, that if they are treated as the case you have seen has been treated, nine out of ten will do perfectly well, even if you never see them again, should the same treatment be continued long enough. Still, you have always to fear a relapse,—sometimes a sudden fatal termination. I remember having seen two cases in which perforation of the bowels took place from ulceration, just at the time the patient seemed to be getting better. I have seen those ulcerations of an extent varying from the size of a pin's head to a size only a little less than that of the palm of my hand, with large raised edges and sloughs. Such cases, however, in later years, have been more rare; but in one year, when an epidemic prevailed, there must have been as many as twenty-three cases in this hospital, all of which were declared to be labouring under this disease. Latterly we have been very free from it.

I had some drawings, gentlemen, to show you, but the darkness of the evening will not admit of it; I shall, however, take care that at our next meeting we shall have lights, when you will be able to examine them.

There are several cases of "nervous disease," as it is called, now in the house.

There is that unhappy man Noland, who has universal palsy. There is a man in the bed opposite to him, the "sneezing man," as he is called, who labours under a very peculiar state of the nervous system. There is another man, in the same ward, of the name of Williamson, who does not appear to me to be quite right in his mind,—with paraplegia. I think these are the only three cases of importance. I am very fortunate in this respect at present, because in general I have a great number of those broken-down cases.

Now, then, there are two conditions in which you are to look upon the brain,—its functional and its structural conditions. You are to remember, as a general rule, that the functions of the brain may be disturbed to any extent, without any perceptible organic disease. But when there is permanent loss of sensation and motion in any of the limbs, and more especially if it be confined to a single limb, and is not the effect of rheumatic inflammation, it is a proof that there is organic affection of the brain; and dissection shows us, invariably, organic disease of the brain. If a patient is paralytic,—not a young woman, who does not know what the devil she would be at,—her case may be hysteria; but if the patient have paralysis, where there has been a fit, that case is one of organic disease of the brain. Ordinarily speaking, if there be paralysis of a limb and loss of sensation,—and it has come on very gradually, there is disease of the brain. In the great majority of instances, disease of the brain is first shown by some loss of power, or diminution of sensation, in some one or other of the limbs. If a lower limb is affected alone, it is called "paraplegia;" and I believe that the term employed is the same where there is an affection of a leg and an arm, as in the case of our "sneezing" man. If it be on one side only, it is called "hemiplegia." These are common expressions that are used in mentioning cases of paralysis. Now it is a most uncommon circumstance to meet with these diseases, without there being organic disease within the brain. In very old people, simple pressure of blood upon the brain will produce palsy. In those cases, and where the palsy has come on without a fit, it is very easily cured, which is a matter of great importance; but where there has been a fit, and the patient has been deprived of sensation and motion for a long time, and then recovers sensation or motion in any of his limbs, there is generally organic disease of the brain. When the patient has lost the use of his limbs, and that loss is attended with trembling—when he sees double, or when he sees only half an object,—there is great reason to suspect disease of the brain, and such cases are very dangerous; they are dangerous when you would least suspect it. They may arise from slow disease of the brain, of the nature of scrofulous tubercles, or even what has been termed "softening" of the substance of the brain, which, as far as I know, in the adult, is a disease of the extreme arteries. All these are cases of organic disease of the brain.

When a patient has had what is called an "apoplectic fit," and he recovers with loss of sensation or motion of one limb, you are pretty sure that there has been on the opposite side of the brain an extravasation of blood. Though the extravasation has not been sufficient to destroy life, it has remained there; the red colouring matter which it contains has been absorbed, the mass of matter has been, as it were, drilled through with small holes, and remains there doing no harm. That I think is the most common cause of palsy; and the case is called "recovery from apoplexy," though the limb still remains impaired. Sometimes we have extraordinary instances of this. We had a very extraordinary case of it in the hospital the other day. A man tumbles out of a gig and gets a violent blow on the head, or a severe fall,—or, like a friend of ours in the hospital the other day, he gets a devilish good licking, and becomes paralyzed. There was a man twenty-five years of age, a prize-fighter, who got what is called "a belly-full," or, as I should rather say, a "head-full," for he came into this hopital perfectly paralyzed in all his limbs. He did not see double, nor did he see half an object; his mind was perfectly undisturbed, nor was any portion of the body more affected than the other. I looked upon this as a case of congestion of the brain, or such an injury as to cause a larger portion of fluid than natural to enter the brain,—not enough to destroy life, but sufficient to interfere with the proper functions of that organ. When he came under my care, I cupped him every six weeks from the back of the neck, took a small quantity of blood from him, gave him calomel, applied a blister to the spine, and dressed it with mercurial ointment, and in the space of little more than two months he was able to walk about. He then began to move his arms, and after a progressive state of improvement he went out by his own desire. I have no doubt that that treatment, if it had been kept up, would have entirely cured him; but I have no idea that his was a case of organic disease of the brain—it was a mere case of extravasation of blood.

Well, then, as to Holland who came in labouring under universal palsy. Both arms and both legs were affected. There was nothing alive but his head and his bowels. At that time his mind wandered, and the functions and perceptions of the brain were disturbed. I took a little blood from him, as in the other case; purged him,

and put a succession of blisters on the spine, which I dressed with mercurial ointment. He became a little better, and I then left off this treatment, which was pretty severe. He was, however, still a good deal affected, and upon a consultation with Dr. CHAMBERS, it was agreed that I should give him the tincture of cantharides, and he has, consequently, been taking thirty drops three times a day for two months. It has produced no strangury, and he makes more water now than it would appear he has ever done before. Whether that may have stimulated the sacral nerves I don't know, but I dare say it did, because by stimulating organs you sometimes stimulate the parts on which they are depending, or which depend upon them; but be that as it may, he has recovered the use of his arms, as you may see, and he is fast recovering the use of his legs also.

Now I look upon the two cases I have last mentioned, not as cases of organic disease of the brain, but as cases of effusion of fluid into that organ. I cannot believe that they are diseases of the brain itself, because, if they had been, I do not think I could have cured them.

There was a young gentleman about this house—a young physician—and his case will illustrate to you how these affections go on—who had headaches; his stomach was out of order, and he thought it was devilish odd that every now and then he saw double. He went to Mr. ALEXANDER, whom he consulted, and Mr. ALEXANDER said it arose from the state of his stomach. He next went to Dr. MATON, and I think the Doctor had some sort of suspicion that it had something to do with some previous venereal attack. Then he went to another gentleman who recommended him to take steel. Then he was ordered to ride on horseback. Then some other gentleman called his affection "hysterical." I don't know how venereal and hysterical affections agree together, but, however, we were all at a botanical lecture here one night, when the late Mr. BURNETT was with us; and we all went into the next room, and were very merry,—the young physician as merry as any of us,—but he was found dead in his bed next morning, from effusion in the brain. I believe there was no organic disease of the brain in his case, but only a disposition in the vessels to pour out blood. *Why* it is so I do not know, but palsy occurs from simple effusion of fluid into the brain, which fluid may itself be got rid of, and the tendency to which effusion may be got rid of also.

Sometimes disease of the brain advances very slowly, and sometimes there is no palsy immediately before death, but there is often violent pain; and in those cases little short fits sometimes occur. Such cases are very dangerous, and you may every twenty-four hours catch the patients, in bed, forgetting themselves. I remember having been called up two or three years ago to see a gentleman who had consulted Sir BENJAMIN BRODIE, and who had some pain in his head, and who told me that he sometimes forgot himself. I was very much fatigued at the time of my visit, but this circumstance of his forgetting himself weighed much upon my mind. He said he was going into the country, as he had been recommended to travel. I called next day, and said to his wife, "I should not advise your husband to travel. It strikes me, that this loss of thought, which he has mentioned to me, is more dangerous than you seem to think it. Take him out of London to a place where he can have just enough of company to amuse his mind, and keep him as quiet as possible." She did so, and I saw him no more for above two years. I was afterwards called in to see him again, in consultation with Sir HENRY HALFORD, and he was then raving. He is now in a state of confinement. Now this is a case in which you see disease of the brain gradually creeping on.

Some years ago a gentleman consulted me about some obscure pains in the head, attended by some absence of thought. I suspected that organic disease was going on in the brain at the time, and I told his family so. He got a great deal better. He consulted me again three years afterwards for diarrhœa, just at a time when he was going to get married. I suppose he thought diarrhœa an inconvenient thing on such an occasion, for that was what he complained of, and of that I cured him. Two years afterwards I was sent for again, when I found him perfectly sensible, but looking very ill. He was sick occasionally, and complained of pains in the region of the liver. He had taken mercury and employed leeches. I saw him first with Dr. NEVINSON, and next with Dr. CHAMBERS, but he was no better, notwithstanding all that had been tried. His father then said to me, "Do you remember an opinion you gave five or six years ago, that he had disease of the brain?" The circumstance recurred at once to my recollection, and I said that I did remember it. In about three months after that time my patient had paraplegia; he lost the use of his limbs and died, and no less than five scrofulous tumours were found in the brain. This was a very remarkable circumstance, and the case altogether shows how long such affections may go on, without ending fatally or producing very characteristic symptoms. There was no affection of the mind in this case. The mind was clear and unaffected up to the last day of his life. Even the mind of the man whose head was beaten to a jelly by his antagonist, was clear and unaffected throughout. In the case of the young physician of this hospital, the mind was as collected as possible up to the

last moment. Reflect, then, on the one hand, how often it happens that the mind is disturbed without organic disease of the brain, and how often it happens that organic disease goes on without what you would take to be corresponding derangement of the functions of the mind.

With regard to the treatment in these cases, that must vary very much. As to the treatment of the patients who are now up-stairs, it has been very similar in all of them. There are various remedies for palsy, after the cause of the disease is at an end. In the first train of cases in which there have been fits, and the patient remains paralytic, local stimuli, and setons on the neck, a succession of blisters, and stimulating the parts with electricity and strychnia, are recommended. Such cases I find to be best treated by blistering the spine, and dressing the blistered surface with mercurial ointment. By that treatment I have seen a great many obstinate cases really recover; but it is one that it is difficult to pursue in private practice, because it is so very painful. I think also that cantharides is useful, and it strikes me that electricity might have often a good effect. With strychnia I can do no good. I have tried it in fifteen or sixteen cases, but I do not think I have ever derived the least advantage from its use. The most effectual remedy is the blistering, and the next is electricity. Another plan, particularly with aged persons, is that of taking away a small quantity of blood by cupping, six or eight ounces every fortnight or month, and keeping the bowels open.

Now, gentlemen, this brings me for the present to the conclusion of what I have to say to you of paraplegic cases, and the treatment of disease of the brain. There is really little to be done in them. However, I shall be able hereafter to illustrate my views farther, by a reference to other cases in the hospital as they occur. Our old gentleman I do not expect will get much better; but Noland, I think, will, as well as the man from whose head I have endeavoured to produce a discharge. He is now getting better, and that discharge is in effect the same as if a seton had been applied. You are thus keeping up a constant discharge by the use of mercury, effecting a considerable drain from the vessels that supply the head, and, probably, coming nearer to the seat of injury than you could approach with a seton. There is one thing to be observed with respect to the use of setons in hospital practice, and that is, that they are apt to be attended with erysipelas, and therefore I never order them. I am sorry to have brought you out such a night as this; but next time we may have a finer evening, and then we shall have lights, and perhaps more curious cases to bring under your notice.

LECTURE

INTRODUCTORY TO A COURSE ON

HYGEINE,

OR THE PRESERVATION OF

THE PUBLIC HEALTH,

BY

WILLIAM FARR, Esq.,
SURGEON, LONDON.

Delivered October 28th, 1835.

GENTLEMEN,—The subject of *Hygeine*, so far as I know, has not yet been treated in a course of lectures by any one in the metropolis; consequently the attempt which I am this evening about to make, presents more than the ordinary difficulties of a first lecture, and must plead for the exercise of more than an ordinary degree of indulgence. Instead of entering directly on the matter of the course, as should be done, were the general nature of the subjects to be discussed thoroughly comprehended, I shall, after examining the history of Hygeine, endeavour to lay before you an outline of the whole course, and direct your attention to some illustrations which may enable you to appreciate, at their just value, a few of the points of view from which we are about to examine Human Life.

"Hygeine" is a naturalized French word, taken from the Greek ὑγιεία or ὑγεία, health. In its present form it is not, as Dr. FORBES has judiciously remarked in his "Bibliography," very agreeable to the English ear; and I should have adopted the term *Hygiology*, but from the dread of attempting two innovations. It is considered equivalent to *the art of preserving health*; and while the exercise of *Therapeutics* restores the sick to health, *Hygeine* is said to teach how life is preserved. Life is valuable,—"All that a man hath will he give for his life,"—and health is a blessing which sweetens every other joy, or bears men up even against misery; so when private individuals only are considered, health and the extension of existence should be the primary objects of Hygeine; to be attained at the expense of almost any sacrifice. Every member of the body may be lost, all its form and loveliness may have perished around it, the intellect itself may be gone, and man may remain,

"Sans teeth, sans eyes, sans taste, sans everything."

and yet may it be our duty to protract animation to its utmost span. Even with the most destitute individual, in the most forlorn condition, nothing could justify the neglect of every necessary sanatory precaution, except the inevitable moral wreck of the heart, to survive which—to sacrifice our

solemn duties, friends, country, or truth, for life, and so, *propter vitam perdere causas vivendi*,—hygeine itself offers no incentive.

Although the preservation of health and the prolongation of life are the great objects constantly to be kept in view in private hygeine, they are subordinate in public hygeine, where nations are considered to the higher end of developing the human faculties, and raising them to their greatest possible degree of organic perfection. Regarding mankind with a general eye, would an intelligent being desire to see a feeble, imbecile, effete population, vegetating through an antediluvian age of some eight hundred winters; or would he attempt to call forth all the energies of humanity, to flourish for a few years or generations, and then to ebb with terrible revulsion? Would he not rather seek to temper the intensity of life, so that, when multiplied by time, the greatest possible sum of vitality might be produced?

"Hael," the Saxon root of "Health," implies *strength*—hence we have "a hale man:"—and "Healer" was a bestower of Health. "Physician" and "Saviour" were translated by the Saxons "Healer." In speaking of the preservation of health, I wish health to be understood as implying not only that smooth course and equilibrium of the functions which is now commonly indicated by the word, or the state to which patients are restored after sickness,—but the *strength* and continued energy of the mental as well as the muscular system. "Cultivation" would be a more appropriate term than "preservation;" as the latter implies only *continuance*, while "hygeine" employs all external influences, and all our knowledge of the organs, the functions, and the habitudes of the human economy, not merely for its *preservation*, but for its *improvement*.

The true object of hygeine, then, is to increase the *sum of vitality* by extending individual life to its full term (averting death); by obviating sickness; and by increasing the energy of all the vital forces, whether nutritive, formative, locomotive, or sensitive and intellectual.

A history of life, of the natural and supernatural means which nations and legislators have employed for its preservation, the plans proposed by enthusiasts, and the valuable precepts which medical men and philosophers have successively deduced from the observation and experience of mankind, would afford us abundant instruction; as it would show the human mind at issue with a problem of the greatest practical importance, and the highest speculative interest. My first step, however, on this occasion, shall be directed to signalizing some of the chief cultivators of hygeine; — to direct you where to refer for more ample information on the subject than can be furnished in these lectures,—and to guard against some false doctrines, which float like warning wrecks on the surface of its past history.

Egypt was considered by the ancients to be the seat and source of medicine. The observance of great bodily cleanliness, strict regimen, mild diet, from which the use of several animals was proscribed; vomiting, purging, and fasting, for three days successively every month; and a simple, invigorating education, inuring the youth to hardships,—these were some of the doctrines of the Egyptians, and formed part of their laws. Physicians were included in the learned class, constituting one all-powerful priesthood, to whom a third of the land was allotted. They practised their art for the advantage of poor and rich indiscriminately, their endowed riches raising them above the necessity of requiring fees. In the time of Herodotus, it is said, the plague was entirely unknown among the Egyptians, many of whom attained a great age.

The four last books of the Pentateuch unfold a great system of hygeine, not constituting a mere philosophic unapplied theory, but enforced by legal sanctions, and carried out in practice to the very letter of its enactments. Moses was learned in all the wisdom of the Egyptians, and adopted several of their practices; but together with the great idea of emancipating his countrymen, and carrying them from a land of bondage to a land overflowing with natural riches, came many profound principles of truth, resulting from the study of the moral and physiological condition of mankind, and a thorough knowledge of the external circumstances — of the country — the wilderness, — through which people were to be led. On account of the relation of miracles mingled with the narrative of Moses, some persons object to references being made to the Pentateuch; or to considering it as historical authority for scientific truths; but internal and circumstantial evidence proclaims its authenticity too strongly to justify the rejection of the facts which it contains, whatever differences of opinion may attend their interpretation. Voltaire says that every thing about Moses is supernatural: "Chaque peuple a ses prodiges, mais tout est prodige chez le peuple juif." After examining the records collected in the Pentateuch, the manners and the style of the Arabs, and all the other attendant circumstances, I think you will come, if not with Warburton, at least with Muller and Roetteck, to a different conclusion. I shall here assume that the facts are historical, and proceed to develop a faint outline of the Mosaic system of Hygeine; important, because it is the first recorded with detail, and because of the mighty principles it involves. The great theological system revealed by Moses, I am neither qualified nor called upon to discuss;

in hygeine we have only to do with the physical facts.

MOSES, *after carefully distinguishing the contagious diseases of the Israelites, commanded that the infected should be isolated.*—In *Leprosy*—a cutaneous affection allied in character to Tubercular Elephantiasis—the suspected man was brought to the priest, who pronounced him "unclean;" or, if there were any doubts, shut him up for seven days, until the symptoms of the case became well marked. The "unclean" were put without the camp, and only visited by the priest: their clothing was burnt. When the people possessed settled habitations in Canaan, unhealthy houses were directed to be examined, and "scraped within and round about," the dirt thus taken off being carried out of the city to an "unclean" place. The worst buildings were to be entirely broken down and removed.

In the disease of *Gonorrhœa*, the identity and antiquity of which, will, I think, appear indisputable to those who read the 15th chapter of Leviticus, every thing and every person touched by the patients, was declared "unclean"—to be set apart and purified by washing. Seven days of purification were prescribed for the cleansing of the impure person; who afterwards offered before the congregation "two turtle-doves or two young pigeons." The minute regulations on this head deserve your attention; so do those relative to the menstruation of females, to their purification, and to cohabitation, particularly in the East, and among the Arabs. Circumcision, still practised among the same races, and, in some tribes, upon females, was intended to promote cleanliness; perhaps to prevent some diseases of the prepuce; or to obviate phymosis and paraphymosis. It was peformed on the eighth day after birth; and often must have destroyed the *most weakly* children, who would bleed to death, or die convulsed: at least such a result has sometimes been observed among the German and Polish Jews. "A bloody husband," said ZIPPORAH to MOSES, "art thou, because of the circumcision."

Animals were allowed for food, but a great many species were prohibited. "Whatsoever," says the Jewish law, "parteth the hoof, is cloven-footed, and cheweth the cud, ye may eat:" swine were excluded because they did not ruminate; coneys and hares because their hoof was not divided. The prohibition of hares would recal to mind the modern Game Laws, were it not in conformity with *a principle*; and did we not know that MOSES always carried out his principles to their most rigorous consequences. Birds of prey, "whatever in the waters hath neither scales nor fins, whatsoever goeth upon its paws," and all flying creeping things, except locusts, grasshoppers, and beetles, were forbidden. The latter flying creeping things were, probably, not unacceptable in the wilderness. The ox, the sheep, the goat, the deer, and the chamois, were orthodox food; in fact, the classification excluded few animals which we now eat, except swine, hares, and rabbits. Everything that "dieth of itself" was pronounced inedible; and the blood of all animals was to be poured out.—"Ye shall eat the blood of no manner of flesh; for the life of all flesh is the blood thereof." *Lev.* xvii, 14. Blood is rarely taken by Europeans, although it is drunk by some carnivorous animals and savages. It is not very palatable, but I am not aware that blood is indigestible. Some think that this enactment was intended to prevent cruelty; in support of which, BRUCE relates, that somewhere in Abyssinia, the fierce nomads drive their cattle and cut steaks from them as they are needed; but this very much resembles MIZELD's story of the goose.*

The enactments relating to marriage, which are now adopted in Europe, were founded on the physiological law, that a degenerate offspring results from the intercourse of animals which are nearly related; and that a proper mixture of alien blood, can alone give birth to an untainted and vigorous race. Cousins and near relations, by being brought into contact when young, and when the affections are opening, too often lay the foundation of matrimonial alliances which infringe upon the general laws of Hygeine. What would have been the result of allowing the connubial union of nearer relatives? The denouncements of adultery, which was punished by death, and the strict investigation of virginity, discouraged promiscuous intercourse,—destructive of the bonds of families, calculated to yield a degenerate spurious issue, and likely to involve nations in exhausting pernicious diseases. Such a restraint was necessary, and justified by the truths of physiology, as, in the language of BEAUMARCHAIS, man is the only animal "qui boit quand il n'a pas soif; et qui fait l'amour en tout temps."

The Levites (the priests or learned caste) were the medical advisers of the people: they were remunerated from the tithe, and received offerings on recovery. JEHOVAH himself was his people's physician; and on condition of their hygeinic and religious obedience, declares, "I will take sickness away from the midst of thee; the number of

* Animal food is so abundant in some parts of South America, in Chili, for instance, that it is not uncommon in that country to kill a large beast for the sake of the single meal of a few pounds weight, which a few travellers can make from certain parts of its carcass, the remainder being left on the plains to appease the hunger and gratify the palates of animals which are less delicate of taste than man, when flesh has been for a few hours exposed to the heat of a climate within the torrid zone. In such a fact the statement of Bruce may have originated.—ED. L.

thy days I will fulfil"—the great aims of our art.

Moses, assisted by the princes of each tribe and the High Priest, made two enumerations of the people, distinguishing "their families by the house of their fathers, with the number of their names, every male by their poll, from twenty years old and upwards, all that were able to go forth to war in Israel." The first census was made by assembling the congregation together on the first day of the second month, in the second year after they were come out of Egypt: 603,550 males above the age of twenty were enumerated. The force of each tribe is stated; the Levites, a month old and upwards, amounted to 22,000; the first-born of all Israel to 22,274. The males above twenty in western Europe constitute about a quarter of the total population, so that 600,000 males imply a total population of 2,400,000. Many believe that there is an error in this enumeration, but it is not necessary to examine the arguments on either side here; I only call your attention to it as the first census recorded, and to the fact that Moses employed this enumeration of the males of twenty years old and upwards, as a measure of the strength of the population at his disposal.

Before him were the thousands of Israel reluctantly torn from slavery, debased in intellect, and corrupted by circumstances, but now safe from Egyptian pursuit: Let us ask "what was the hygeinic problem which Moses had to solve?" His great and avowed purpose was to put the Israelites in possession of Palestine, already fenced with walled cities, and guarded by a warlike population; the difficulties to be overcome were the traversing of an uncultivated but not extensive desert, obtaining supplies of food, and converting a race who were rendered dastardly and feeble by bondage into the warlike progenitors of an exterminating people, to extend its numbers from Lebanon to the Euphrates. Led to action in the first year, the unwarlike combatants, affrighted by the Egyptians, and easily turned aside by other small tribes, were driven back by the Amorites, like swarms of bees. Moses, from the moment of that defeat, devoted the entire generation to death in the "terrible wilderness," where pestilence, thirst, and hunger, in the course of forty years, destroyed all that bore arms (above twenty years of age), and only allowed the stronger children to grow up for the purposes of war, disciplined by the Mosaic laws. In the accomplishment of his designs, the lawgiver spared no lives: at Sinai 3000 rebels of his own people were slaughtered. The conquered tribes were exterminated, and their riches were appropriated; or the women only, who had not known men, were saved, to augment the number of children. Notwithstanding the waste occasioned by death or war, on numbering the Israelites a second time, at the expiration of thirty-eight years, the great legislator records with dignified satisfaction, that the males of twenty years old and upwards still amounted to 601,730, animated by a very different spirit, and a far higher degree of vitality, than languished round the whitened bones which were sleeping in the desert. With the prophet called to curse them, gazing on one hand over the country they were about to possess, on the other over "Israel abiding in his tents;" his enraptured lips might well exclaim, "Who can count the dust of Jacob? How goodly are thy tents, O Jacob! and thy tabernacles, O Israel! As the valleys are they spread forth, as the cedar tree beside the waters. God brought him forth out of Egypt. He couched, he lay down as a lion, and as a great lion, who shall stir him up!" Thus Moses left the Israelites, a numerous nation, raised by great principles, a system of laws, and hygeinic adaptations from slavery, and perfectly fitted to its great destiny; and thus he accomplished one of the most interesting physical regenerations recorded in early history. In contemplating this mighty work, shadowing forth preconceived ideas, and the result of theoretical principles, rigorously and sometimes cruelly enforced, the fugitive herdsman of Jethro, on the volcanic Sinai, standing before a rebellious people, and viewed with an enlightened philosophy, must remain for ever sublime in character, as he was conceived by Angelo.

Turning now from Egypt and the southern shores of the Mediterranean, let us direct our attention, northwards, to the coast of Asia Minor and Greece, where the first temples were raised to Esculapius and Hygeia, and where human culture developed to a high degree all the physical and psychical powers of our nature.

The constitution of Sparta, founded on simple principles, and professing as its determined purpose, the development and equal distribution of physical strength and vitality among all the citizens, presents another remarkable example of the influence of hygeinic agents on races of men. Some degree of uncertainty hangs over the early history of Lacedemonia and that of its lawgiver Lycurgus. We do not know in what precise hygeinic condition he found and left that people; but it is almost certain, that after journeying several years, studying the laws of Minos, comparing the effects of Cretan simplicity with Ionian luxury, and making himself acquainted with the physical condition and the philosophic doctrines of the surrounding nations, Lycurgus returned to Sparta, and established a new legislation, founded on education, which he looked upon "as the greatest and most glorious work of a lawgiver." The children were taught to endure labour, to fight, and to

conquer; they were lodged in the country; went barefooted, played naked or wore one upper garment, and slept together on rushes. They were fed on coarse spare diet, exposed to alternations of hunger and thirst, bodily suffering, and fatigue, and practised severe gymnastic exercises. After an animal is born, its character and nature are cast and fixed. So the education of LYCURGUS began before birth. He sought at its source and root to fashion the Spartan race in the iron mould of his system; for this purpose he first reduced, according to ARISTOTLE, the women to some rule: "he ordered the virgins to exercise themselves in running, wrestling, and throwing quoits and darts; that their bodies being strong and vigorous, the children afterwards produced from them might be the same. At certain festivals they sang and danced, unapparelled, but with all modesty, before the fathers, the young men, and all but the mocked and scorned bachelors of the city; and, to use the expression of PLATO, drew the young almost as necessarily by the attractions of love, as a geometrical conclusion follows from the premises. On marriage, the bride was carried off by violence; and only seen illicitly by the bridegroom, neither oppressed by wine, nor enervated by luxury (*Plutarch*). The father could not rear his own offspring before he had carried it to the elders; who, if the child was strong and well-proportioned, left it with the mother, and gave orders for its education by the state; but if it was weakly and deformed, commanded it to be thrown into a deep cavern near the mountain Taygetus. The women, too, washed their new-born babes with wine, to try, PLUTARCH correctly adds, "their habit of body; imagining that sickly and epileptic children would sink and die under the experiment, while the healthy would become more vigorous and hardy." The public education began at the age of seven years. For further details on the Spartan education, I must refer to PLUTARCH, XENOPHON, and PAUW. These outlines present a picture sufficiently revolting to the better feeling of this age,—to us of the nineteenth century, who send foundlings to hospitals, nurse scrofulous infants, and educate the children, even of the labouring poor, in workhouses. Yet revolting as this system seems, it formed LEONIDAS, and the three hundred who fought and died at Thermopylæ "to obey the sacred laws of their country." It was founded on physiological laws, and realized at a great expense of suffering and life, the idea of LYCURGUS, in producing a chosen nation, endowed with extraordinary energy and an uncommon degree of vitality.

This investigation of the hygeinic legislation of the Hebrews and the Spartans, appears to me to preclude, to a certain extent, the necessity of further historic inquiry into the hygeine of ancient and barbarous nations, for their institutions embody the practices not only of the early, but of the modern uncivilized nomad and fixed tribes which are scattered over the earth, and present them in a tangible, but improved and refined system. Hunger and necessity exposed the North American Indian to the hardships and dangers, the alternations of heat and cold, the inanition and fulness which the Spartan laws enjoined; the Indians were taught manual dexterity; their eye and senses were keen; they too could endure corporal suffering, and smile in the very pangs of death; they also disciplined their women, and abandoned their weak children. And so it was not only in North America, but in South America, and among all the vigorous races of savage men which we now call "barbarians."

In order to understand a system which attempted to augment the sum of a people's vitality, by eliminating and pruning remorselessly away all the weak shoots, imagine 1800 children born on the same day at Sparta. They are taken before the elders, and a certain number are rejected; those that are strong and well-proportioned are carefully educated, and their bodies are tempered by discipline to the circumstances in which they are destined to move; after the expiration of twelve years, only 1000 remain. Now conceive the same number (1800) born in a neighbouring city, where the circumstances are nearly the same, with the exception that all the weakly children are tenderly brought up, till they are driven by necessity from their parents' arms. How many of such children would be alive at the end of twelve years? Not all, but probably more than 1000; more lives would exist than at Sparta, but the vitality of many of these saved children would be feeble, their lifetime would be impaired by sickness, and *afterwards*, in youth and in manhood, they would be swept away by the implacable severities of a rude and uncivilized state, if these were not by some accident averted. If they lived to possess offspring, and that offspring extended to three or four tuberculous, scrofulous, enfeebled generations, their proportion would be augmented; while organic debility was weeded from the Lacedemonians, the North-American Indians, and vigorous barbarians, in its germ, by the laws, and by the stern discipline of nature.

The Russians, in an extreme climate of rapidly alternating heat and cold, still bathe their young infants in the cold rivers, and then bring them suddenly to the warm stoves, to harden their constitution, according to Russian writers. I shall prove from experiments, and the relative mortality of infants in the warm and cold months, that extreme cold destroys the young of all warm-blooded animals; whence it may be inferred that these cold-baths are a summary substitute for both the Spartan examination, and

the deep cavern near Taygetus. That some great cause of mortality exists among the Russian children none will doubt, when they learn from Sir FRANCIS D'IVERNOIS, that at Nigni, near Novogorod, out of 1000 baptisms, 661 die before attaining their fifteenth year; but whether the cold-baths, the cold climate, or the want of food, contributes most to this lamentable destruction, we cannot decide. It is generally agreed that there is a considerable proportion of old men in Russia, and this has been adduced in proof of the longevity and health of the entire population.

Among the most civilized nations of modern Europe, out of 1600 or 1800 children born, only 1000 remain alive at the end of the 12th year. According to the accurate calculations of Mr. EDMONDS, founded on the last population and parish register returns, the annual deaths in England and Wales, for the first five years of life, were 46 per cent. in the six years elapsing between 1818-24. Admit that the mortality in infancy had been greater, and that many of the weaker children had perished, is it not probable that the mortality in manhood would have proportionally declined? The state of mortality in Belgium entitles us to answer this question in the affirmative. In Belgium, 66 infants, between birth and five years of age, die annually per thousand; and in manhood, between twenty and thirty years of age, 9; between thirty and forty, exactly 10 per thousand perish; while, at the same ages in England, 10 and 12 instead of 9 and 10 per thousand are lost. You perceive here an oscillation in the line of vitality,—in the proportion between the dying and the living. If it is lowered at one time, it rises correspondingly at another. Again, where the temperature, the place, or the social condition, renders life difficult of preservation,—where the external hygeinic conditions on which our physiological processes depend are unfavourable,—the deaths in infancy are immensely augmented, in order to raise the subsequent period, destined for the production of the species to a certain pitch of vitality, below which its generations would cease. In the cold climate of Sweden, instead of 45, as in England, 90 per 1000 died annually in infancy (1755-75). Between the ages of twenty and forty, however, the mortality was not quite so great as in this country. In Stockholm, out of 3000 born, only 1000 survived the twelfth year. You conceive, perhaps, now, that notwithstanding the sacrifices of infants, the sum of vitality may, possibly, have been as great in Sparta as in other and worse climates, where cold destroyed the young, or even in the same climate where the infants were reared.

If, for a moment, you examine the fine races of dogs, of sheep, of oxen, in this country, or the fleet race of English race-horses, you will find that the system of breeding and training—directed not to increase the longevity of those animals, but to give them muscular strength, velocity, and sagacity, or simply weight and flesh,—has been eminently successful. I will not here dwell on the system which those who breed these animals adopt; I shall recur to that on another occasion, and now only call your attention to one fact—viz. that they invariably *reject*, and never *breed* from, those animals which do not possess that vigour, sagacity, or well-favoured aspect, which they aim at rendering permanent in a race. If every sickly, puny, cowardly, stupid individual, was necessarily retained, and all were allowed to associate promiscuously, the present perfect animals would speedily degenerate, like neglected uncultivated vegetables, to their primitive state of wildness. The extension of these principles, deduced from the observation of domesticated animals to the human species, constituted a main feature of the laws we have just passed in review; many of which are now, happily, discountenanced, alike by humanity, and a more enlightened hygeine, and by all the governments of civilized Europe, except Russia. In the next lecture we shall examine the hygeinic doctrines of HIPPOCRATES, GALEN, and the moderns, and present some illustrations of the influence, and the means of measuring the influence, of hygeinic agents.

ON THE

TREATMENT OF FRACTURES

WITHOUT THE AID OF SPLINTS.

By W. C. RADLEY, *Esq., M.R.C.S.L., Newton Abbott, Devonshire.*

(Continued from page 174.)

THE importance of the primary treatment of fractures during the first three, and up to ten days, of itself constitutes an apology for stating what every surgeon knows, viz., that the weak lotion of a solution of superacetate of lead, in the proportion of a drachm to a pint of pure water, can be converted into a decided astringent and repellent, in cases of tumefaction, by adding sixty or a hundred grains of alum to the lotion. I know of no better lotion to fulfil the latter intention than such an application, to wet a bandage. "Pour le plaisir de changer," we have the *liquor aluminis compositus* of the London Pharmacopœia, perhaps too strong by twice over; but that can be modified *ad libitum*. With these, and a watery solution of opium, and many other vegetable infusions of the narcotic sedative class, we need not imitate

our Gallic neighbours in the use of their "Eau de Vie," in every case of recent injury. When, indeed, there is danger of a loss of vitality through gangrene, we may apply a firmentive cataplasm of yeast to the wound, and bathe the surrounding parts with the brandy aforesaid; but as this state of things is the inevitable consequence of previous and too violently increased action, running into mortification, the surgeon will use every gentle means that mercy can devise to prevent such a catastrophe, the best being found in proper agents to allay heat, which spirit or brandy would create and excite.

Page 382 of Sir Astley Cooper's "Treatise," contains his "general directions for the treatment of compound fractures of the fore-arm," which run thus:—"The arm should be supported upon a splint, so as to be kept perfectly free from motion." And I should for the same reason place the arm, the leg, or the thigh, upon a soft pillow. What! rest a sore limb on the narrow line of a splint board? Bid me repose on the bars of a gridiron! To think of keeping a limb "perfectly free from motion" there, is absurd. If you wish your patient *not* to be easy, *not* to enjoy repose, nor to keep his limb still, lay it on a splint. Again; "evaporating lotions should be applied;" but of what use can they be when the immoveable bandage confines the hot vapours close around the limb? "And the limb should not be disturbed,"—true, but foreign aid creates more disturbance than the injury itself,—"unless the patient has symptoms of a suppurative process, when a small opening should be made in the bandage, to allow of the escape of pus, but still the bandages should be suffered to remain,"—that is, all must remain in *statu quo*; no one must examine the seat of injury. Like the man with the iron mask, every feature of the disease must be hidden from scrutiny, the masked party himself not daring to remove the dressings in which his limb is incased. "The bandages are suffered to remain." The patient treated in this way, finds that he has much to *suffer* besides the bandages. "The patient should be bled from the arm if the inflammation and constitutional irritation be considerable." "Certainly," said I, two years ago, after perusing the "Treatise," and transcribing the passage, in the excitement of the moment I added the following remarks:—"If it was, for some unknown reason, a *desideratum* to produce local and constitutional irritation, and to urge on that irritation to active inflammation, I know of no plan of treatment so likely to produce those mischievous effects as the above-recommended long-continued pressure on a pierced, lacerated, and fractured limb, where the natural sensibility is vastly increased by diseased action."

I now retrograde to page 173 in the "Treatise," which relates to fractures of the lower portion of the thigh, *in the joint*. The treatment is thus described:—

"*The limb is to be placed on a pillow* in the straight position, and evaporating lotions and leeches are to be used, to subdue the swelling and inflammation. When this object has been effected, a roller is to be applied around the knee, and a piece of stiff pasteboard, about sixteen inches long, and sufficiently wide to extend entirely under the joint, and to pass on each side of it, so as to reach to the edges of the patella, is to be dipped in warm water, applied under the knee, and confined by a roller. When this is dry, it will have exactly adapted itself to the form of the joint, and this form it will afterwards retain, so as best to confine the bones. Splints of wood or of tin may be used on each side of the joint, but they are apt to cause uneasy pressure. In five weeks passive motion of the limb may be made, to prevent anchylosis."

In the first part of the quotation I only glean negative support for my pillow mode of curing fractures; but new light soon breaks in upon my plan,—original with me, because twenty years ago (I confess at that time I had not read Pott), from the first day to the last of my attendance on a case of fracture, no other basis was employed on which to rest the limb, but a pillow and the bed, nor other restraint used than a bandaging nor other means than lotions, to accomplish a cure.

The case of Sir Astley is one of the worst of fractures, and as it is a most painful one, the limb is directed to be placed on a pillow, with *a piece of pasteboard* sixteen inches long and of goodly width, *interposed between it and the injured joint*,—a splint in a modified form! Venerable fathers of surgery, who have departed, just look over your shoulders, and see what a motley group ye have travelling behind ye! *Plaster-of-Paris dealers*, looking for orders to incase immoveably straight a fractured limb; *carpenters*, with their boards and glue; *tea-tray-makers*, with japanned splints; *ironmongers*, with tin splints; *blacksmiths*, with iron-plate splints; *Hindoos*, with cane splints (better be applied to some backs than broken legs); *sailors* from the Arctic seas, with Martin's whalebone splints; *milliners* with pasteboards, for Sir Astley's splints; and *breeches-makers*, in the rear, with straps and buckles to bind the broken ends of bones together. How many more I cannot stop to say, for really this system ought long since to have passed the rubicon of humour and raillery, and journeyed into oblivion. Had the words of Sir Astley directed fractured limbs to be placed on pillows, without a splint between, his great authority would long since have rendered my puny efforts to banish the present system needless. Had Sir Astley pillowed up

his patients, as I do mine, I should not now have been attempting to do my best to save future painful throes to those whose nerves are racked with pain in and out of hospitals under the torture of tight bandages and hard splints.

"But, perhaps," say some, "the splint is padded, and the pasteboard is wetted, therefore they are soft and yielding; what harm, then, can they do?" I ask, "What good can they do, which the simple pillow would not effect? Are you not thus striving to approach the pillowy mode? You have relaxed a little, and softened down your treatment, in an *extremely painful case;* and if the pillowy mode is the best in a desperate case of fracture, how much would it advance the cure in every common and less dangerous case!" Take this syllogism: The application of a pillow is right in the worst and most painful cases of fracture. Why? Because of the pain. But every fracture is painful; *ergo*, every fracture should have a pillow. But Sir Astley recommends stiff pasteboard, macerated in water until it become so much softened as to admit of its being moulded to the shape of the part. I grant that this is the least objectionable of the tribe of splints; but even this is unnecessary, and inflicts a modicum of pain, which, even, is injurious. Soaked pasteboard, or light millboard, is only useful to envelop the arm or the leg of a person who must prematurely labour after a fracture. In this way my instructor, a talented surgeon (Dr. John Hughes) of Liverpool, was accustomed to use these materials nearly thirty years ago.

One paragraph respecting the more argumentative reasons why the splint is employed, and I quit reasonings for facts. A judicious writer (Mr. S. Cooper) says, "Hence there is a necessity of employing means for fixing the broken limb so effectually, that it may continue perfectly motionless during the whole time requisite for the union of the fracture." The truth of this I positively deny. It is *not* necessary that any limb, with any kind of fracture, should be kept so perfectly motionless. True is it that Sir Astley Cooper, at page 382 (before quoted), says, "The arm should be supported upon a splint, so as to be kept *perfectly free from motion.*" These latter words are synonymous with "perfectly motionless." They echo the same sense. But in page 97 of the "Treatise," there is a discrepancy with some of the contents of page 382. In a note to that page, speaking of common fractures external to a joint, Sir Astley gives the following important monition:—* "I find, by moving the bone from time to time, that in proportion to that motion is the quantity of callus produced." Of course callus means ossific matter. The more motion, the more bone. Nothing can be plainer. So much for the theory of perfect immobility,—a theory founded on erroneous perceptions. Of course too much motion would produce great mischief, and as to the due quantum, "wisdom should be present to direct it."

Another argument used by the defenders of splints is this, that splints keep the extremities of the fractured ends of the bone in contact. Attend to Sir Astley Cooper's admission on this point; I quote *verbatim*, as in all the other instances:—"When a fracture occurs amidst muscles, those which are inserted into the fractured part of the bone, have generally a tendency to keep the extremities of the bones together, with some few exceptions." Why then use splints? The display is one of false science to effect what nature does by a natural process. If this in the generality of fractures be true, (and what good surgeon will deny it?) the arguments for splints are a waste of breath, and the simplest mode of cure should be at once admitted in their place.

I shall now aim to prove, that in no case of fracture whatever (that of the radius sometimes excepted) is anything more required than a strapped pillow, with its padding, a tailed bandage, and such lotions and dressings as it may be proper to apply to the surface of the limb. Simple fractures being by far the more numerous, are those with which we shall have most to do. The "exceptions" are fortunately few, and if they (attended, as they too frequently are, by desperate and complicated circumstances) cannot be cured, they must, I suppose, be placed in the "chapter of accidents," in the usual way. My theory and practice shall be drawn from *bonâ-fide* cases,—not manufactured to support views that need the friendly aid of fictitious patients.

Case 1.—Mr. Moses Crossman, sen., of the village of East Ogwell, in 1819 fractured his tibia by a fall from a horse, or, I rather think, by his horse falling with and upon him. It was a very bad simple fracture, attended with tumefaction and pain. One unfavourable and vexatious circumstance was (too common in country practice) the distance which I had to travel before I could get to the residence of the patient. Although there was much swelling in this case, yet an aluminous lotion and a tailed bandage, with the aid of a pillow and straps, cured this fracture in five weeks, when Mr. Crossman quitted his bed altogether for the day.

At this period, every case of fracture was a battle of words between the friends and

* Some hypercritic may object by saying, that at page 97 Sir Astley speaks of common fractures, and at page 382 of those which are compound. But no one will venture to say, that what is safe in a common fracture must be inadmissible in a compound one. Fracture is fracture, and the *nature* of either case is the same.

myself, about the non-employment of the splints: in the present case, the Rev. Mr. W———e called in while I was engaged in the remedial operations on the leg. His stay was short. It developed a few questions on the "usual means" of curing fractures, accompanied by a look of contempt at my simple mode, and ended in a sneering sentence, muttered in the door-way, about "dabblers in the art." I only smiled, allowed the ill-bred gentleman to go his way unanswered, and resolved to persevere in my plan of curing fractures with as little pain as possible to the patient, who in this case was a healthy man of forty-five, who, as I have said, soon got well, and prided himself as much after the fracture on his small leg with a light low boot, and fine muscular calf, as he had done before it, and with as good cause.

CASE 2.—This occurred nearly seven years ago, and shall be related at greater length, because more witnesses can be cited to prove the truth of the details:—Mrs. Alsop, about seventy years of age, in the month of April 1829, was placed in great peril by the fall of a stack of chimneys during a storm, which dashed, with the roof under it, into her bed-room. I then resided in the adjoining house. Hearing an indefinable crash, I dressed, and hastened into the street, and soon found my way to the scene of danger. The bed was demolished, and the old lady lay under a great weight of bricks, slates, rafters, &c. On being removed from her alarming situation, the tibia of one leg, and the fibula of the other, were found to have suffered the injury of simple fracture. Mr. Charles Gaye, a surgeon of valued professional ability, whose friendship I have long had the happiness to possess, was also called in; as also was Mr. W. Y. Bond, another surgeon, who usually attended the family, the extent of injury done to the vital parts not having then been ascertained. But as I was first present, the more immediate care of the patient was willingly confided to me by Mr. John Alsop. We (the surgical trio) now formally deliberated on the case, and the best mode of securing the fractured limbs, when the following dialogue occurred.

Mr. Gaye. "Why, Radley! where are your splints?"

R. "I never use any; I have not used any for many years."

Mr. Gaye. "Where is your authority for that practice?"

R. "I have none but my own experience, that splints are useless in fractures."

Mr. Bond. "What! set a fractured bone without splints? I never heard of such a thing in my life!"

Mr. Gaye. "Nor I."

R. "Well, let me have my way on this occasion, and you shall have yours another time."

The concession was granted with a good-natured smile of incredulity from Mr. Gaye, and a polite assent from Mr. Bond.

Mr. Gaye. "Proceed. We will look on."

Three lengths of tape, each of two yards, were each doubled, and laid on a common feather-bed, and on these straps a feather pillow, beaten smooth, was laid. Boyer would have exclaimed "C'est tout trop doux!" It is all too soft! Pardon me, say I, it is not too soft in any case. A sixteen or eighteen-tailed bandage. I don't remember which, was laid on the pillow, and the patient carefully removed to the bed, and the most painful limb, that with the fractured tibia, was placed on the pillow. A reduction was then gradually and effectually made, the tails of the bandages were lapped over and over, and the sides of the pillow were brought to the sides of the leg, gently supporting it *in situ*, while the straps became a threefold means of keeping all steady. To support the foot, a piece of tape was sewn to each of the lower corners of the pillow, and tied close underneath the sole, which it supported much easier and better than does the usual "foot-board." My two friends assisted me, with many a humorous wink.

The leg was placed in the straight position, and rested on the calf and the heel. In order to relax the muscles to the half-bent state, or the degree of semiflexion, a large piece of flannel, perhaps a petticoat, is, in such cases, inserted between the pillow and the bed, for the purpose of raising and bending the knee-joint. The leg now presents the usual *declined* plane. The femur is a little thrown towards the pelvis, until the most important of the flexor and extensor muscles of the thigh and leg *lie at ease*. The under surface of the pillow was, in the present case, padded up, here and there, to support the small part of the leg, until the patient, after frequent and cautious inquiries on my part, declared that the limb seemed to lie with an equal pressure on every part. This latter circumspection is very necessary to be observed. Now look at the limb! As steadily supported as a ship resting in the stocks, and yet on so soft a basis, that nothing in it gives pain or uneasiness. What principle of surgery ought to have prevented this limb from lying in so much comparative ease, and the patient from reposing thus quietly? She did repose; and all persons in cases so treated, will repose likewise. All injuries will excite increased action, and produce some degree of heat, tension, and pain. The next morning my patient complained a little, and the surface of the tibia and the fibula of the other leg (treated much in the same way as its fellow, but with a different position, being placed on its side) were moistened with the *Liq. Ammon. Acet.* much diluted. The skin having been previously sponged with tepid water, the bandages, wetted with the lotion above, were laid on,

and a hoop, fastened to the sides of the bedstead, supported the bed-clothes on the arch of its space, and prevented them from pressing on the toes or any part of the limb, and aided to keep it cool.

The tumefaction was moderate, as was the pain, because the heat was not allowed to remain confined long enough to produce its exciting effect; and as to other irritating causes, there were none, save that of the injury, the force of which had been very great, and at the end of a week caused great tenderness on the surface, the nervous papillæ being very irritable. *Tinct. Opii, Spir. Vini Rectificat.*, and *Tinct. Hyosciami*, were alternately used, with a pledget of lint, bathing the surface over and over again while any undue heat remained. Invaluable is this mode. The matter of heat readily unites with sulphuric ether, or a strong pure spirit, and flies off. The main point is not to reduce the natural heat of the limb much below, nor let it reach above the natural standard. On this hinge turns the state of suffering or of ease in these cases. Living so near to my patient, I was enabled to attend to this frequently. Indeed, she found the heat, pain, and soreness, thus fly off together so certainly, that I was summoned whenever there was a little return of pain. But the nurse was well able to attend to it, by turning off the tails of the bandage, wetting them, bathing the limb, and replacing the bandage as before. This was done perhaps twenty times in the day and night for a short period, and with the aid of a sedative and narcotic draught at night, and occasional doses of ol. ricini, she made good progress towards a cure. As for the incessant care with which I attended this case, and which, in narration, may seem tedious, to me it was not tiresome, though no one has a greater dislike of vicious irritability in the temper of a patient, excited as it sometimes is by factitious wants. But such a case as this (and there are many such) demanded every care. The patient was a feeble, aged woman, with all the querulousness of numerous years upon her, justifying and amply repaying the frequent treatment of adjusting the pillow by padding here or there under it, or the occasional insertion of a little cotton wadding between the pillow and the leg, for even a *soft pillow itself* will incommode a surface exquisitely tender. The limb was not moved, or only passively (and then moving pillow and all together), when the bandage was remoistened, and the fractured part exposed to view, by which nothing wrong could happen without being seen. But not once did the patient displace the ends of the bone. Not one spasm occurred to effect such a mischief, and yet in the course of a long experience I never recollect to have attended any person who was so easily fretted by light irritation and pain.

At the end of the third week, my patient being naturally an attenuated subject, the eye could plainly distinguish, through the integuments, the breach of continuity in the bone, marked by a rough, irregular, thick line, or cleft, descending obliquely through the bone; appearing in a vertical direction, proceeding from the anterior to the posterior surface. But not the least deviation from a straight line in the general contour of the limb could be detected, nor could the finger discover anything in passing over its course, save the oblique line or depression described.

At the end of the fourth week, by comparing the legs, it was not distinguishable which tibia had been fractured, until the finger was slowly passed over the fractured part, and on the last day of four weeks from the accident, she walked across the room, leaning on the arm of her son. Now, remember, here had been simply a rolled bandage applied spirally around the leg. I said to her, "Madam, you have heard much of splints, and have been advised by some to have them, will you now wear one, or a piece of pasteboard?" Her reply was, "Neither, sir, I thank you; I feel very comfortable, and shall be able to take care of the leg myself." And from that time forward she did so, with no other assistant means than the spiral bandage, which was taken off every night and reapplied every morning. In the autumn of the same year, I frequently had the pleasure of seeing her walk in the street, with her accustomed light and nimble step.

Some have complained that little progress has been made in the treatment of fractures since the days of Hippocrates, but, I trust, that this is a great improvement.

Case 3.—The next case I shall relate is one of a very different character from the last. It occurred in the person of a rough labourer, from the granite mountains of Dartmoor; presenting in many respects contrast enough to the preceding patient. The Hightor quarries, about nine miles from Newton, afforded employment to two or three hundred men, and as one of these was engaged on the granite bed, in removing what is technically called "the head" (a thick super-diluvial deposit of moor-stone, lying on the more compact rock), a mass of it fell, and buried him beneath. He was carried to a cottage at Hightor vale, from whence an express was sent off to me, for it was then a part of my occupation, and one irksome and laborious enough, to attend, on contract the sick and injured workmen at this place. I found him writhing under a fracture of the right femur, three inches above the patella, — quite near enough to the knee-joint. The man possessed robust strength and rigid muscular fibre. As to

the direction of the fracture, the great tension already existing prevented my knowing much about it at that time, but I afterwards found that it passed obliquely across the bone; the mass of stone having broken it short off. The man lay on a poor feather bed, with a coarse sacking bottom, laced up with a slack hand, so he sunk down low enough *posteriorly*. What would Boyer have said on this occasion? "Soft and yielding indeed!"

In this state of things it would have been difficult to lay out the thigh straight, which I never do, according to Dessault; so the method of lying "at ease," something in the way of our surpassing countryman Pott, was adopted; the lower part of the *thigh* and the whole knee and leg, being so supported on a long pillow, and padded up underneath, that a regular plane was obtained; no one part sinking lower than the rest. Slight extensions were made from time to time, in the hour or two employed to get it into a comfortable state, talking to and cheering him the while. The fracture being reduced, the bandage applied, and a hoop employed to support the bed-clothes, I left him.

Second day. The "gude wife" thought the hoop useless, and had taken it away. The thigh was rather too warm, and the man not by any means easy; so I nailed on the hoop to his old oaken bedstead, wetted the bandage, bathed the skin, and left him easy, in a better state, with full instructions to the mistress what to do to prevent pain.

Fourth day. Other cases prevented me riding over until early on the morning of this day, when I was summoned by one of those hasty messages that put an abrupt termination to all philosophic speculation, desiring me to come to him, for he had not slept during the night, from pain &c. I hastened up and found him with a red face and a bouncing pulse, and the skin hot and feverish. How could this be? The hoop remained as I had left it, but on removing the coverings, cause enough presented. The careful wife, after wetting the bandage in the night, which she thought was too cold, had placed a heap of blanket under the hoop, upon the leg, instead of spreading it in a canopy over it. On removing it a cloud of hot gas arose, almost like the discharge on letting off the steam from a little engine. The causes of pain, restlessness, and fever, were at once fully explained to them, and in no very measured terms. The limb still lay well, and in a good position. Bathing the skin with tepid water first, and then with spirits of wine, caused evaporation until he said, "Cool enough now." He had a white tongue, so I gave him two large spoonfuls of the following julep, instead of abstracting blood, and left him:—

℞ *Antimon. Tartarizat.* gr. ij; solve in *Aquæ Bullientis* ℥j; et adde, *Aquæ Frigor.* ad ℥iv; *Liquor. Ammon. Acet.* ℥j; *Spirit. Camphoræ* min. xx.* M. cujus, cap. cochl. maj. j om. bis hor. postea.

Some persons regard a little alteration of temperature as a trivial matter, but of all things in the treatment of fractures, this appears to me to be the most important in the inflammatory stage. Let the limb be placed and the fractured bones be reduced with whatever perfection of art may be used, if an atmosphere, *sui generis*, surrounds the limb, heat, tension, pain, spasm, and a starting in sleep, are sure to follow. In the present case no other mistake of the sort occurred. On the following day he was much better; he had perspired freely, and had from that derived what Mr. Pott recommends in strong terms; while it was to the patient an invaluable advantage, as Mr. Pott further says, "that the surgeon never found it necessary to have the leg or the thigh once, during the cure, removed from the pillow on which it had been deposited." Of course I feel *the great practical value* of this sentence, but Mr. Pott might, *had not his splints been in the way*, have said,—"The advantage of that mode of cure is invaluable which allows any old woman to open the bandage, permit the hot air to escape, and, after bathing the surface again, lay on the tails of the wetted bandage, and thus yield the patient ease twenty times in a day or night, with as much facility as she overlaps the belt of her gown,"—all which cannot be done where splints are used. Surgical dandyism in this case would have applied four splints,—one above, another underneath, and one on either side; and with so many "safeguards" few surgeons would consider it safe to tie and untie them every half hour. Besides, it would occupy too much of the time of a professional man; for surgical pride would not allow such frequent meddling with the established order of things by any old wife. Yet it would be impossible, even for a four-legged Chiron, to keep a patient easy at a distance of eight miles over the most hilly and rugged roads.

Perhaps some surgeons would have thought it right to bleed this patient as recommended by most authors, but I never yet bled a patient with a fractured bone (fracture of the rib and cranium excepted), nor shall I ever, while other antiphlogistics, Mindererus's spirit, and emetic tartar, are extant.

But to return. In ten days this man was safe from inflammation and its effects, and on the fifteenth day from the accident I was perfectly astonished to find him with a sling

* *Mistura Camphora* would have been better, but what is carried in the pocket should be *multum in parvo*.

under his foot and over his neck, pacing in front of his cot on a pair of crutches. I remonstrated with him on his danger, and represented to him the certainty of his having a crooked limb, but found all argument was uselessly opposed to his obstinacy, so I threatened to speak to Mr. Whittaker the superintendent of the mines. "He did not care a —— for any body," he said, and would do as he liked. My first impulse was to forsake the patient at once, but mercy, as I thought, forbade, so on the next visit a pair of wide plasters of *emplast. lithargyri c. resina* were overlapped on each other across the rectus femoris and above the fracture, which had barely united, at the same time admonishing the man to be careful. "When may I go a fishing?" however, was then, as it had frequently before been, his anxious inquiry. "Don't think of it yet," I always answered; but believe it or not who likes, at the end of three weeks (to a day) from the fracture of the bone, he went on one crutch, using his fishing-rod as a walking-stick, to a trout stream below Holwell Tor, and there fly-fished for the starvelings till he was tired, and almost every day in that fine season he was thenceforward so employed. This was in the summer of 1825, and as he was off for employment on some other work, I lost sight of him until the last summer twelvemonth (1834); when, walking over one of the extensive marshy meadows of Kingsteignton, I saw him immersed up to the insertions of the glutei muscles in the muddy bottom of a water brook, sinking down at every step he advanced, with a sort of net in his hands, catching eels. Conversing with him about his thigh, he informed me that in one of his fishing rambles near Hightor, soon after he supposed the bone to be quite strong, he was lured so far from home by the romantic scenery about Becca Fall, that he became exhausted, fell on the ground, and might have died there, had not a boy, who was casually passing, procured a man and horse from a neighbouring farm, and he now laboured in most pathetic words to convince me how much pain he suffered on being set on the back of a wretched animal, whose false movements hurt him at every step as he passed over the rocky ground on his way home. Foolish fellow! His was the quickest, and, from his great imprudence, the worst cure of broken limb I ever had. True, the limb was always afterwards strong enough and long enough, but he turned out his foot awkwardly. Had he remained in bed for four weeks instead of two, all would not only have been well, but would have *looked* well.

Respecting fractures like this, near the extremity of a bone, the following candid admission is made in the "Surgical Dictionary" of Mr. Samuel Cooper:—"In a fracture near an articulation, it is to be observed, also, that the splints have no command over the short fragment of a broken bone."

Pity is it that they should ever be laid over any portion of a limb at all. If some fractures will heal without the "command" of splints, why not more central fractures in the same bone?

Newton Abbott, Devon, Nov. 2, 1835.

*** Another valuable paper by Mr. RADLEY, on this exceedingly important subject, is in our possession, and should our space admit of its introduction, it shall have a place in THE LANCET of next week. We consider that the facts which have already been advanced by Mr. RADLEY, are entitled to the particular attention of English practitioners, and we believe that the liberal and enterprising surgeons of the *North London Hospital* will be the first to give the plan of Mr. RADLEY a trial in the metropolis.

THE ACARUS SCABIEI.

IN a clinical lecture delivered last week at the "London Infirmary for Diseases of the Skin," Dr. J. P. Litchfield, physician to the Infirmary, gave the following demonstration of the above supposed author of the irritation experienced in the itch:—

I have here, gentlemen, a patient, a young girl, from whom I shall endeavour to extract the acarus scabiei. She has been affected with the disease twice, although she is only ten years of age. She is the child of a tradesman, and caught the complaint of a female servant, who was immediately afterwards discharged. The child communicated the disease to her family, thereby fully establishing its contagious character. Frictions with sulphur ointment were employed to cure it, and the remedy succeeded after a month's assiduous application. Shortly after the patient was cured she came again in contact with the servant who had before infected her, and the result was a second attack of the disease; it is for this attack that she is now under my care.

You may perceive that the disease is at present confined to the fore-arm and hand; you will also observe that the eruptions are of different kinds, some being of the true primary vesicular character, others having the inflammatory and pustular appearance, which is caused, as I have explained, by external irritation. I now select three small vesicles which I surround with a circular ink-mark, in order that we may not confound them with the adjacent eruptions. By examining the interior of this circle with the powerful magnifying-glass which I here have, you will perceive, a small faintly-marked red line, diverging from the

centre pustules, at nearly right angles. This I consider to be a small furrow or canal, and if we are so fortunate in the present instance (and I succeeded yesterday and this morning in the same subject) as to find the acarus, it will be in this minute covered way. I now, therefore, take a needle about three inches long, with a fine flattened point, and puncture the pustule. I next gently and slightly slit up the integument in the direction indicated. If I mistake not I have now upon the point of my needle a small white globular body, scarcely perceptible to the naked eye. Having placed this shapeless point in the field of the glass, you will, on looking steadily at the object, see the globule, magnified to the size of the sketch which I now show you,* and which was made from an insect extracted yesterday. The insect under the glass exhibits so much vivacity in its movements, and such power in its many-jointed limbs, that you will have no difficulty in understanding the cause of the intolerable itching under which patients in this disease uniformly labour, and which we should find it hard to explain on any known pathological principle.

The acarus scabiei, as you are probably aware, belongs to the order *aptera*. It has, as you may perceive, eight legs, divided into flexible joints. The legs and proboscis are of a purple-red colour, as though injected with dark venous blood, but it is rather remarkable that the colour disappears almost entirely after the insect has been kept for some time. I have here one which was taken this morning from the same patient. For nearly an hour after its extraction this insect exhibited the same coloured appearance. But you will observe that the legs and head are now both nearly colourless. The body of the insect which I have last shown, is dry and shrivelled, very different from the full form and gelatinous appearance of the recently-extracted insect. In both cases numerous small spiculæ or hairs may be seen passing off from the extremities and body of the animal.

LIGATURE OF THE SUPERIOR THYROID ARTERIES, IN CASES OF LYMPHATIC GOITRE.

Repeated success has confirmed Professor Chelius, of Heidelberg, in the favourable opinion which he has held for several years, on the propriety of tying the superior thyroideal arteries in cases of large goitre, contrary to the advice of many surgeons. In all cases of *lymphatic* goitre, where these arteries are much dilated and sensible to the touch, this ligature is as much indicated as in the *vascular* goitre. In four cases, where M. Chelius has tied these arteries, the success of the operation was not retarded by any accident; the two following will serve to show what benefit we may hope to obtain from the process, even under the most unfavourable circumstances.

Case 1.—G. Haltenstein, twenty-six years of age, was attacked at the age of fourteen years with a tumefaction of the thyroid gland, which gradually increased. At the age of sixteen, in consequence of the patient having carried a heavy load on the head, the tumour became much larger, and during the last two years remained stationary. The goitre now presented a nearly uniform tumefaction; however, the left lobe ascended somewhat higher than the right; the tumour also exhibited a central, and two lateral portions, divided by two furrows, very sensible to the touch. The tension is equal throughout; the skin not altered, merely covered by blue varicose veins. The tumour extends from the os hyoides to a little below the upper part of the sternum; its dimensions before the operation were as follows:—

The greatest circumference at the base of the tumour, 25 inches, 4 lines.

Distance from one angle of the lower jaw to the other, measuring over the tumour, 18 inches, 6 lines.

Transverse measurement at the most voluminous part, 15 inches.

Perpendicular measurement from the os hyoides to the sternum, 7 inches, 10 lines.

The left thyroid artery was felt beating for the extent of about an inch at the left upper angle, but the vessel was not enlarged. On the right side the pulsations were more sensible, though more feeble.

The inconveniences occasioned by the pressure of the goitre were very great; the patient slept but little; he swallowed with difficulty; the respiration was short and difficult, and on the least effort he was attacked with pain in the head and oppression about the chest.

The ligature of the left superior thyroid artery was performed on the 23rd of March, 1834. Its traject being determined by the pulsations, an incision was made in the direction of the vessel, which was isolated with difficulty from the tissue of the goitre. The wound was immediately closed with sticking-plaster, and the patient copiously bled. Rest and a strict antiphlogistic diet were ordered. In the evening the patient felt well enough; the tumour was much flattened on the left side, and was cold and

* An inch and a half in its long diameter, and very similar to the engraving which we gave of the animal in The Lancet for Oct. 4, 1834, page 61.—Ed. L.

insensible. The wound healed rapidly, and on the fourth day after the operation the tumour was reduced to the following dimensions:—

Circumference of the base diminished by 5 inches, 5 lines.

Transverse measurement, diminished by 2 inches, 6 lines.

Perpendicular measurement, diminished by 3 inches.

The inconveniences to which the patient had been subjected now gradually disappeared, and he was soon able to return to his ordinary occupations. The tumour continued to decline. Towards the end of 1834 the left side had become remarkably smaller than the right, and the patient enjoyed the full exercise of all his functions; he was advised to submit to a new operation in case the right side of the tumour should increase and give rise to any inconvenience; but as yet this has not happened.

Case 2.—N. K., 30 years of age, of a weak and scrofulous constitution, perceived the first trace of goitre at the age of 11. The disease was hereditary in his family, his mother and five of her brothers and sisters being also affected. The tumour having gradually increased, and occasioned uneasiness in respiration, the patient, who had previously tried various internal remedies in vain, presented himself for treatment in June 1832. The tumour, as large as the doubled fist, corresponded to the left lobe of the thyroid gland; it had a pear-shape, and the inferior rounded part hung down upon the upper third of the sternum. The tumour was hard and uneven, and exhibited in several points traces of the application of the seton. The superior thyroid artery, very much dilated, was felt pulsating strongly, over a great extent of surface. In this case the knotty form of the tumour, its long duration, and the change of texture produced by frequent applications of the seton, left little hope that ligature of the artery would be attended with success; the case was one which rather seemed to require extirpation of the gland; however, the ligature was chosen as a means of rendering at least any secondary operation more easy. The two superior thyroid arteries were therefore tied; the wound healed readily by the first intention. The tumour immediately became more flaccid and soft, and gradually diminished in a manner beyond all expectation. After having remained a considerable time in the hospital, during which the swelling still decreased, but not very sensibly, the patient was discharged, with injunctions to return again in case of necessity.*

The process to be followed, according to Professor Chelius, for the ligature of the superior thyroid arteries, should vary according to the circumstances of the case &c. As it is impossible to determine beforehand in what direction the first incision should be made, the Professor considers the rules laid down by Jameson, Zang, Walther, Langenbech, and others, as illusory. He thinks that the vessels never pursue a constant direction, and are, moreover, frequently displaced by the tumour. The only guide we can follow is the pulsation of the artery. We are sometimes compelled to take it up above, and sometimes below the omo-hyoideus muscle, but in either case this is done with equal facility.

* Clinique of the University of Heidelberg. From *Gaz. Med. de Paris*, No. 42.

CASE OF

CROUP WITHOUT COUGH.

The following case, observed by Dr. Michaelis, is so interesting, that we are induced to extract it, nearly entire, from the second number of *Hufeland and Ossan's Journal* for the present year:—

Case.—In the month of February 1831, the author was called on to see a child who had been dangerously ill for several hours. The patient, between four and five years of age, had been quite well the day before, and was suddenly taken ill within a few hours of the visit; when first seen he was lying on his back in bed, and the face was expressive of great anxiety and suffering. On examination, nothing could be discovered but some trouble in the respiration. There is no pain in the abdomen or head. The disease was therefore regarded as a severe inflammation of the lungs, and some leeches were applied to the chest, and ammonia and tartar emetic were given in small doses. At five o'clock p.m., the child's state was much worse; the difficulty of respiration is so great as to cause apprehension of instant death; the child lay immoveable on its back, the head was thrown backwards, and the arms stretched out on the bed so as to form a right angle with the rest of the body. The little patient *had not yet coughed*, and, indeed, it was doubtful whether he was hoarse before, as the parents are not certain on this point.

The absence of any cough in the present instance was calculated to throw great difficulty in the way of diagnosis, and after having reflected at the bed-side on the various affections of the respiratory apparatus to which children are subject, M. Michaelis was induced to ask himself, "Could this be

an example of croup without cough?" Every effort was made, but in vain, to force the child to cough, until at length the object was obtained by forcing him to respire the vapour of strong vinegar; this produced the wished-for aspect; a violent cough, having all the characters of the croupal cough, came on. The true nature of the disease was now manifest. A vomitive was immediately ordered, and the child threw up a quantity of glairy mucus, and a substance whose membranous nature was quite evident. The repeated vomiting was followed by a marked improvement in the respiration, and the little patient lay with his arms more close to his body. Leeches were now applied to the neck, and calomel, with sulphur. antimonii, was administered, to procure copious stools. On the following morning the child appeared much better, he slept pretty well, and the cough was softer and more easy. Towards morning a general sweat had come on; the respiration was much more free, and without any peculiar tone. The calomel powder was continued, with the antimony, and, finally senega was given, and in four or five days the child was so completely recovered as to be able to play about with his companions.

M. Michaelis justly considers this case as unique in the records of medicine; because the cough, which all writers mention as the pathognomonic symptom of the disease, was here artificially excited, while in the cases given by Heim, the true nature of the disease was not discovered until after the patient's death. In his excellent treatise on croup, Heim makes the following remarks:—"Even the best physician may mistake the nature of this disease. Not long ago a child two years of age died at Berlin, who had been hoarse before he was attacked with the disease, and therefore did not present the change from a clear to the croupal voice. It was only two days before his death that I discovered the true nature of the complaint, and that principally from the circumstance of his having the head constantly thrown back; all aid was now too late to save the infant's life." And in page 15 he says:—"We sometimes observe catarrhs without any hoarseness, and the latter symptom is frequently but slightly marked in several cases of croup, but when it is very much developed, the patient is incapable of producing the characteristic tone." Finally, at page 19, he says:—"When the voice is totally extinct, the physician may readily be deceived; I confess that I have been mistaken this way more than once." These citations prove, beyond all doubt, the existence of croup without its peculiar cough, and it seems strange that the circumstance should not have drawn the attention of writers on diseases of children, to whom Heim's work cannot be unknown.

In the first case of croup which we published in the first number of the volumes of The Lancet for the present year, page 29, the child's voice was completely extinct, and the efforts of cough took place without any of that crowing sound which is peculiar to croup. The absence of these two symptoms is noted in the report of the case, but as no doubt whatever existed as to the nature of the disease, sufficient attention was not paid to a circumstance which, in other cases, would certainly have rendered the diagnosis very difficult if not impossible.

EXISTENCE OF SUGAR IN THE BLOOD OF DIABETIC PATIENTS.

A paper on this subject has been published in one of the continental journals, by M. Ambrosioni, head apothecary to the hospital of Pavia. Chemical research has already placed beyond doubt the existence of saccharine matter in the urine of persons affected with diabetes mellitus, but the presence of sugar in the blood or other fluids has as yet remained very doubtful. Marcet, Wollaston, Prout, Kane, and, lastly, Berzelius, have endeavoured to discover it, but without success. Wollaston was so frequently disappointed, in his attempts at discovering saccharine matter in the blood of individuals labouring under this affection, that he was led to conclude, either that the sugar is formed in the kidneys, or, being produced in the stomach by an imperfect digestion, is carried at once to the bladder by some unknown passage. The pharmacien of the Pavia hospital has been more successful in his experiments. In the month of June 1834, Professor Corneliani forwarded to him about a pound of blood drawn from the arm of a patient whose urine had furnished a large quantity of sugar. The following process was employed for its analysis. The clot and serum, mixed with a certain quantity of water, were gently boiled, and the liquid parts separated from the coagulated by a filter. The liquid portion was of a dull-red colour. In order to remove the colouring and other animal matters, it was

treated with the subacetate of lead, which threw down a dense, dirty-white, precipitate. A current of hydro-sulphuric acid was now passed through the mixture, to throw down the lead; the residue gave a pultaceous, dark mass, which, when diluted with water and filtered, became a brown liquid; this latter was boiled in an aqueous solution of white of egg, which, by coagulating, divided the liquid into two parts, one flocculent, brown, and insoluble, the other liquid and colourless. The latter, being gently evaporated, gave a sirup analogous to the same which had been extracted from the patient's urine. The sirup, being laid on one side for a few weeks, gave rise to the formation of colourless crystals of a prismatic form, and with a rhomboidal base, in a word, exactly similar to those of sugarcandy. The non-crystallized sirup having been exposed to a temperature of 26°, R. with a little beer-washings, the vinous fermentation was soon developed. The quantity of sirup obtained from the pound of blood might have amounted to about one ounce; the crystals of sugar weighed nine grains.

The same chemist has also analysed the blood of a female who died of diabetes mellitus, but he was unable to find the least trace of sugar, either in the blood itself, or in the serum effused into the cavity of the pleura.

VENEREAL DISEASES OF THE TESTICLE.

Abstract of a Communication by J. W. CUSACK, *M. D., of Stevens's Hospital, Dublin.*

So many surgeons of the highest authority have admitted the existence of venereal affections of the testicle, that we must assume the existence of an acute or chronic enlargement of the testis, originating in the action of the venereal poison, to be proved; but here our knowledge, derived from published opinions, ceases. These affections have never been classed, described, or explained, according to their differences, from dissection. From the general conviction of the profession, Mr. Cusack considers himself justified in assuming the existence of a disease of the testis depending on the presence of the venereal poison in the system; at the same time he admits, that as the disease occurs in the more advanced stages of constitutional lues, and after the use of mercury, a doubt must be entertained as to the influence which constitution and treatment may have in producing this disorganization.

The disease, so far as he has observed, commences in the body of the testis, and there is at first little alteration in the form of the organ; as the enlargement advances, the tumour becomes more globular, the epididymis soon being lost in the general mass; the tumour has a fleshy feel, but differs much in density in different parts. Partial adhesions in the cavity of the tunica vaginalis, combined with effusions into that cavity, even independent of the internal changes which may be going on, render primary smoothness and uniformity of the surface an uncertain symptom; so uncertain indeed and so little uniform are the primary appearances, that Mr. Cusack believes that the best practitioners would be unable to make a perfect diagnosis of the disease, if unacquainted with the *history* of the case, and the attending circumstances. Its termination is either resolution or suppuration or induration, and the formation of granular bodies, ending in total destruction of the functions of the organ. Mr. Cusack hesitates to believe, and is unable to affirm from his own practice, that this affection of the testis is met with in the earlier stages of secondary symptoms, or during the presence of any of the forms of true papular eruption. The *acute* form accompanies venereal hectic, pains in the bones, and either a scaly eruption or perhaps a solitary spot, apparently belonging rather to the genus acne; but these instances are comparatively rare, and of fifty patients at present under treatment in *Stevens's Hospital*, there is not one case to adduce in confirmation of such an opinion. The patients who suffer from this affection are those persons who labour under affections of the periosteum and bones, and bear the marks of having suffered from pustular and tubercular eruptions. Specimens of the disease were submitted to the Surgical Society, and these were wholly derived from persons whose constitutions were broken down from the protracted forms of the disease with which practitioners are familiar, but neither from his own opportunities nor from any other source could Mr. Cusack exhibit a specimen of the changes which take place in the more curable forms of secondary syphilis. Ten preparations were laid on the table, exhibiting the disease in all the stages of its progress, from a small circumscribed tubercle, in an otherwise sound testis, to the contracted, indurated, and completely disorganized gland. The structure of the tubercle is rather soft, but harder than common scrofulous tumour, and surrounded by a thickened layer resembling a cyst, the product of inflammatory action. In one preparation the tubercle was in the lower part of the testis, which was otherwise so sound that the epididymis admitted of injection by mercury, while in the opposite testis the tubercle was softened, and contained a glairy fluid.—*Dub. Journ.*, Nov. 1835.

OPERATIONS FOR STONE.

The following statistique of operations performed at the *Hospital of Incurables* and of *St. Mary*, at Naples, during the Spring of 1835, we extract from the *Gaz. Med. de Paris*, No. 44:—

The neck of the bladder was divided downwards and to one side. Professor DE RENZI is in the habit of publishing annually the statistics of all the operations for stone which are publicly performed at Naples. How much would be gained by science if the surgeons of our great hospitals were compelled to imitate this example, for the principal operations which they are called upon to perform! We should then have a body of authentic facts upon which confidence might be placed, and from which deductions of the highest value might be drawn.

At the *Hospital of Incurables*, ten operations were performed; six of the patients were below ten years of age; the others had not reached that of puberty. In four cases the stone was large; in three it was small; in three of a moderate size. There were nine males and one female. Only one patient died of the ten; after having cut into the bladder, the surgeon was unable to extract the stone. The bladder, after death, was found much inflamed, almost gangrenous, and the mucous membrane was reduced to a kind of pulp.

At the *Hospital of St. Mary*, four patients were cut, and all recovered: three were below fifteen years of age.

Since the year 1821, up to the present time, 454 patients have been operated upon in these two hospitals. 439 males, 15 females; or 216 children, 191 adults, and 47 old. Of these there were cured 388; died 66; giving an average of one death in nearly every seven cases.

ARTIFICIAL ANUS CURED BY A NEW PROCESS.

IN the month of September last, M. AMUSSAT, of Paris, was called on to see a child two days old, who had not yet passed any meconium. The anus existed, and was well formed, but the rectum terminated by an opening in the vagina. On examination it was found that the rectum did not exist for two inches from the anus. M. AMUSSAT, therefore, determined on seeking the extremity of the great intestine, separating it from its attachment, and fixing it by suture to the opening in the skin; for this purpose he made a T incision between the vaginal opening and the anus, and having introduced the finger by this opening, he separated the vagina from the coccyx and sacrum, until he arrived at the blind end of the great intestine, which was placed above, to the right side of the sacro-vertebral angle. Arrived at this point, the manœuvres produced a desire to evacuate the meconium. The gut was recognised by Messrs. Deneux and Lebaudy, who were in attendance. It was seized with a hook, separated from the surrounding parts by the finger, and drawn gently down to the opening in the skin, where it was fixed with several points of suture. It is now twenty-eight days (said M. AMUSSAT at a late meeting of the *Academy of Medicine*) since the operation just described has been performed, and no accident has occurred, the child being in the most satisfactory state.

INQUEST AT FARNHAM.

To the Editor of THE LANCET.

SIR,—The details of the subjoined case will go farther to prove the necessity for the appointment of medical coroners, than any which I have yet known to be brought before the public. The verdict delivered was "Accidental Poisoning," and nux vomica was the poison sworn to have caused the fatal result. The medical evidence and a general outline of the inquest I transmit for publication, well assured that the pages of THE LANCET will be open to the insertion of facts of so much general importance, especially as the character of a respectable individual is involved in the inquiry, the medical evidence having guided the coroner and jury in the delivery of the charge and the verdict. No other channel offers to clear the person on whom odium is attempted to be cast (the local opportunity being hermetically sealed), and he here, therefore, begs to challenge those opinions which can decide the question at issue. The details are given from memory, for on applying to the coroner for a copy of the depositions, he declined granting one, on the ground of the concession being illegal, though he politely read the depositions to me; and as Mr. Portello appealed to me in his distress, I am bound to carry the inquiry forward to an issue, that I may not be involved by undertaking a defenceless cause.

On Thursday, the 8th of October, a travelling man and woman called at the shop of Mr. Postello, a druggist in Farnham, and requested some medicine for a sick child of thirteen months old. The child was drowsy, and its bowels were much confined, to ob-

viate which latter symptom he gave two aperient powders. (In the course of Mr. Postello's examination he stated his entire forgetfulness of this circumstance; but that the man and woman had applied to him was distinctly proved in the evidence). The first powder was given on the Friday morning, and was followed by sickness, the stomach doubtless rejecting it from previous disorder; nothing having passed the bowels, and the child becoming more drowsy and insensible on the Sunday morning, the other powder was given. Its effects were *four stools*, and no sickness. Nothing further was attempted for its relief until Thursday, when Mr. Bury, a surgeon of the town, was called in. He found the child in a state of coma, with very contracted pupils, and at first sight pronounced the child to be *poisoned*. He attended it up to Friday, and as the coroner also declared to me, administered medicine, although it was not stated in evidence that he did so. On the Friday it died.

The rumour of a case of poisoning justified the holding of an inquest, Mr. Bury having previously opened the body and head to illustrate and establish the fact. A copy of the exact words of the evidence having been refused, I can only state the substance; and as the material part is the post-mortem examination, I give it as read to me, waiving the phraseology.

Mr. Bury stated that he found the brain healthy, but with rather an *undue quantity of water in the ventricles*. His researches were then transferred to the body, where he found the lungs and heart and the abdominal viscera healthy, excepting the stomach, in which he found a powder, which he secured by a process which he specified, and instantly adjudged it to be nux vomica. He stated that as no analytic test could establish its identity, he depended on analogy; and having procured some of the recent drug, he mixed it with the fluid of the stomach, tasted the suspected and the real, and was satisfied that nux vomica had killed the child. It did not appear in evidence which of the two he had tasted first, nor how long a period there was between tasting the true article, and the supposititious one. Having thus satisfied himself as to the nature of the poison, he stated that there were traces of inflammation of the coats of the stomach. This closed the substance of his medical evidence.

It appears that Mr. Postello had forgotten every thing connected with the dispensing of the medicines; but the local situation in his shop of a jalap preparation which he used for aperient purposes, and the powdered nux vomica, were remote from each other, and this Mr. Bury was shown to be the fact on calling previous to the inquest. In the routine of an extensive business, it is possible that little attention may be paid to personal identity, and Mr. Postello failed to remember the individuals who had called on him about the child. The verdict was returned, and Mr. P., not by direct charge, but by inuendo, was asserted to have caused the death of the child, and this too even by one of the jurymen. On the Sunday following, he sent for me, and begged me to inquire into the justice of the allegations. I saw the parents of the child, and then for the first time it was discovered, that Mr. Bury had himself given it medicines; and from the woman I learnt, as well as from the father, that the effect of Mr. Postello's powder was precisely that which was intended. Mr. P. having entrusted his case to me, and well knowing the serious consequences of such a general impression, I advised him by all means to adopt the most strenuous measures to clear himself from so unhappy a suspicion. We went to the coroner, who feelingly expressed his sincere regret, and viewed the case in the most serious light, promising Mr. Postello to give him, if possible, a copy of the evidence; but this has since been refused on the ground I have named. The question of the propriety of a druggist prescribing for a sick person is not for me to determine. The proceeding had already taken place, and my desire is to establish the impossibility of the powder given by Mr. Postello having poisoned the child. I believe that no reasonable man, certainly no medical man, will assent to the allegation, that a medicine given for a specific object, and fulfilling its design, and taken on a Sunday morning, could be found in the dead child's stomach on the Friday morning. As to the accuracy of the mode of determining the poison adopted by Mr. Bury, or its incompatibility with the appearances found in the stomach, together with the state of health which the child was admitted to have possessed for the nine days previous to the fatal event, I have nothing to say. I appeal to every reflecting mind to decide whether the powder so found, could be the powder given by Mr. Postello. Both the father and mother declared, that the child became sick, very sick, from the medicine given by Mr. Bury, and that it was much convulsed after taking it. Now the ways of Providence are indeed mysterious, for the elucidation of crime and criminal carelessness. Mr. Postello's medicine, after operating four times, six days before, must, to have so poisoned the child as Mr. Bury imagined, have traversed back, as a purgative, many feet of bowels, to reach the dead child's stomach, and then maintained its position in defiance of the vomiting produced by Mr. Bury's medicine. It shall be conceded that nux vomica was found; found by Mr. Bury. All I seek to prove is, that Mr. Postello was not the instrument of its introduction there, either directly or indirectly. But why do I argue for a conclusion that must be inevitable? This inferential mode of destroying

a character, is sad indeed. Had Mr. Postello been provided with a competent medical friend at the inquest, the coroner and jury, if they had believed the child to be poisoned, would never have suspected Mr. Postello of the act, and that the coroner had that impression on the inquest I can positively assert. A hundred times better would it have been for Mr. Postello to have been committed for the crime of poisoning at once; he might then have cleared himself on his trial, in the minds of his townsmen, from what has excited, and is calculated now to continue to excite, distrust. But this inquest is final, and although to clear Mr. Postello every fair proposition has been made, especially that of strict inquiry by a select body of medical men, the appeal has been contemptuously rejected, and a threat of action even hinted at, if he perseveres in the demand. The coroner, Mr. Woods, is in every sense a gentleman, and was most anxious that the character of Mr. Postello should be cleared; but the only resource now is the public press; and to your journal he appeals, as to the most honest of medical periodicals. With respect to *my* position in the affair, Mr. Postello having thrown himself in the emergency on me, I cannot allow the facts to be smothered.

That medical knowledge in a coroner is a most essential requisite for the good both of the public and of individuals, must be too obvious from the history of this case, to need further exposition from me. I remain, Sir, your most obedient servant,

G. V. ROGERS, Surg.

Farnham, Surrey, Oct. 26th, 1835.

P.S. The mother was found by Mr. Bury in a state of extreme intoxication, when he first visited the child.

THE LANCET.

London, Saturday, November 14, 1835.

A FACT which is most happily characteristic of the hole-and-corner proceedings in the College of Surgeons, has just been presented to the profession in the election of a new member into the Council. We ought, in truth, to make some distinction between the two last elections, referring specifically to the first of them as furnishing the best evidence of the event to which we allude. Mr. GREEN, of *St. Thomas's Hospital*, was not chosen the other day by the self-perpetuating junto, but was, positively, elected *some months since*, on the resignation of Mr. LYNN; and yet so secretly, so covertly, and—we may, in justice, state, with reference to the great body of the members—so clandestinely, that it was not known up to this very week, to the profession in the metropolis, that Mr. GREEN had become a member of the Council; and, in reality, the circumstance is now for the first time published to the profession generally.

What a state of things is this! And yet this system of secrecy has been endured by the medical community since the barber-surgeons were first erected into a corporation! Even the charter of 1800, under the authority of which these odious secret elections were conducted, was merely, in spirit and in letter, an emanation from the Act of the 18th of GEORGE II. It was not, therefore, Mr. GREEN who was chosen in consequence of the vacancy which was caused by the death of Sir WILLIAM BLIZARD, but Mr. CALLAWAY, the Assistant-surgeon of *Guy's Hospital*. Although, therefore, we were wrong with respect to the *name* of the gentleman who was last week stated by us to have been elected, still, so undeviating is the College in showing its unjust and pernicious partiality towards the surgeons who are connected with the hospitals of this metropolis, that not a little of our argument was inapplicable to the occasion. If Mr. KINGDON and hundreds of others had not been turned aside to give place to Mr. GREEN of *St. Thomas's Hospital*, they were made to yield to the preference which was shown for Mr. CALLAWAY of *Guy's Hospital*. To such a barefaced and scandalous extent is this practice of choosing the hospital surgeons carried, to the exclusion of other gentlemen of acknowledged attainments, abilities, and industry, in the profession, that out of the twenty-one Councillors who at the present moment sit in the College, the enormous number of seventeen are holding office in the "recognised" hospitals of this metropolis; and these men, conferring in conclave in the College, issue

their regulations for the government of the students who belong to their own institutions as well as for the government of the gentlemen who are connected with the private schools. Seventeen out of the twenty-one Councillors belong to the "recognised" hospitals. What an astounding fact!

In defiance, however, of these circumstances, the members of the Council have the effrontery to contend, that when a vacancy occurs, they elect the new member according to the seniority of his standing in the list of the commonalty. The gross and daring falsity of this assertion is evident from throwing into contrast the few hospital surgeons, with the many thousands of the medical commonalty who hold no situations in our public medical establishments. If it be a system of "seniority" or of "rote," let us see with what honesty it has worked:—

In London, and within a circle of ten miles around the capital, it has been calculated that there are nearly, if not quite, a thousand resident members. How happens it, then, if the rule of seniority be observed in taking the names as they stand upon the list, that a moiety of the entire body of the surgeons and assistant-surgeons of our hospitals should be seated in the Council at one time, and only four be selected from the remaining nine hundred and sixty-six members? These numerical facts are so damnatory to the electoral proceedings of the Council, that it is unnecessary to expatiate on the infamous partiality which has been shown towards particular individuals and institutions. On some occasions, it is quite evident that the names of hundreds of members must be passed over at a single election, in order to reach that of an hospital surgeon, and having arrived at persons connected with their own institutions, seniority is *then* allowed to exercise its full influence in guiding the decisions of the Council.

Let us direct our attention to the choice of Mr. CALLAWAY.

Who are the *surgeons* of *Guy's Hospital?* Mr. ASTON KEY, Mr. JOHN MORGAN, and Mr. BRANSBY COOPER. Who is the *assistant* surgeon of that institution? Mr. THOMAS CALLAWAY. How many of the four occupy seats in the Council? Only one. Who is that individual? THOMAS CALLAWAY, the assistant-surgeon. In this election, therefore, the practice of election according to seniority has been observed, Mr. CALLAWAY being the senior member of the College.

This exposition will lead many persons to inquire, how it has happened that the three surgeons of the hospital, who are Mr. CALLAWAY's juniors in professional standing, occupy a higher station than himself, when it is well known that the whole four were the apprentices of the former surgeon of *Guy's Hospital*. Adequate information on this subject can only be furnished by our ancient friend King HARRISON; but it is a well-known fact that on the election of Messrs. KEY and MORGAN, a scandalous attempt was made to nullify the claims and pretensions of Mr. CALLAWAY, and, subsequently, when Mr. B. COOPER was chosen, having served an apprenticeship there to render himself "*eligible*," after he had acted as an assistant-surgeon in the army, the office of assistant-surgeon in *Guy's Hospital* was then, for the first time, created. Mr. CALLAWAY received it, and the emolument, it was hoped, would operate as hush-money on the mind and tongue of that gentleman. We apprehend that the wily treasurer was successful in his project, and it is now sufficiently obvious that the scheme was by no means an unfortunate one for Mr. CALLAWAY. Had that gentleman been excluded,—had he, through the instrumentality of calumny or intrigue, been cut off permanently from all official connection with *Guy's Hospital*,—is there a man in the profession who will not believe that such a circumstance would have been made by the majority of the Council in Lincoln's Inn Fields, the ground-work for visiting upon him a continuance of the

persecution; but Mr. CALLAWAY having become the assistant-surgeon of *Guy's Hospital*, the Councillors of the College leap over the heads of some two or three hundred members of the commonalty, for the purpose of bestowing upon that gentleman their smiling and corrupt partiality. Far be it from us to deny that the Council have a legal right to act as they have done. The charter has conferred upon them an odious power, and odiously do they exercise it. Ignorance gave them a bad law, and they have perseveringly resolved that its provisions shall always be executed with cupidity. There are, however, some members of the College,—no, we mistake,—there is *one* member of the College, who says that "it cannot be denied that the changes made "of late years by the Council have been "marked by increasing justice and libe-"rality; and, to revert to the case in ques-"tion" (the admission of Mr. KING to an examination for the diploma), "the Council "in that case acted upon principles more "liberal than the charter itself seems to "have prescribed." This language we quote from the letter of Mr. KING, which appeared in THE LANCET of September the 26th, the first Number of the current annual volumes. The introduction of seventeen hospital surgeons into a Council of twenty-one, the whole twenty-one having been selected from amongst upwards of 6000 members of the College, furnishes a beautiful "mark of *increasing justice and liberality*."

This may not be an inopportune moment for referring to the attempt which was made by Mr. KING, in the letter already cited, to draw a contrast between the proceedings of the London University and the College of Surgeons, more especially as related to the election of professors in the former establishment, and the admission of candidates to an examination for the diploma in the latter.

Mr. KING is of opinion, that the College made a display of "liberality" in his own case, in admitting him to an examination. But did not the Council know that he had gone through all the routine of academic costs and charges, and that as they could not expect that he would then pay any fees, as a pupil, in the hospital schools of London, it was evident that they would extract *nothing* from his pockets if they did not obtain the twenty-two guineas for the diploma? It was a god-send to the Council, as it could not be pleasant to them that a gentleman who had been an *interne* of the *Hotel Dieu* should practise in London as a surgeon, without being a member of the College; and yet Mr. KING considered that the circumstance of his having an opportunity afforded him by the Council, of fooling away twenty-two pounds, and throwing the money into *their* pockets, was "a mark of their *increasing justice and liberality!*"

Extraordinary as is this opinion, Mr. KING is equally peculiar in his notions of justice with respect to the administration of affairs in the College and the University. In the one case the writer tries to test the conduct of the rulers at the head of the collegiate institution, by reference to the terms of the charter. In the other instance he makes no mention whatever of the deed of settlement, but relies on the speeches and professions of individual proprietors, who were amongst the earliest supporters of the University. Mr. KING is for the concours in medical appointments; and in a note which was inserted in THE LANCET of Oct. the 19th, professes to be glad that THE LANCET is "*beginning to advocate the election by concours.*" Why, THE LANCET advocated the concours long before Mr. KING took up his residence in London! This was the first journal that called upon the Council of the University to elect its professors by concours,—by competition, or wrangling. A similar call has repeatedly been made by us on the Council of the College of Surgeons, and many years since we joined in a petition to the legislature, praying that the members of the profession generally, might constitute the judges in all medical elections.

When the Council of the University declined to elect by the open system of concours, we were not insensible to the force of the reasons which induced them to elect their professors in private, and under the authority of such information, regarding the candidates, as they were able to obtain from public and private sources. The University was altogether a new institution; it was an experiment on the public mind. Owing to the liberal principles on which it was sought to be established, all the host of bigots and fanatics of the day vomited forth their calumnies against it, and endeavoured to overshadow the prospects of its conductors. It was felt, therefore, by every person who was desirous that the spirit of the age should be liberalized, that a knowledge of science should be more widely diffused amongst the members of society, and that the literary reputation of the country ought not to be wholly centred in Oxford and Cambridge, that the failure of the University would be a national calamity. The most extreme caution, therefore, on the part of the conductors was demanded, not only in the election of professors, but in the arrangement of every circumstance which was calculated to affect the permanent interests of the establishment. Who, then, shall blame the Council for having endeavoured, at the opening of the institution, to present to the public a phalanx of professors who had already acquired a certain extent of reputation, and had won, by their displays of industry and talent, a considerable share of the public confidence? The concours had not been tried in England; it was not understood here; and men of intelligence and reflection will allow that the Council were warranted in not attempting to sustain the experiment of establishing the University by the institution of what was to them another experiment, the concours. But the work of competition has commenced, the University Hospital confers the office of House-surgeon on the successful competitor in an open examination, where the minds and qualifications of the candidates are tested by appropriate measures. This is a symbol of what is to follow. As the chairs become vacant, and as the University maintains its hold on public opinion, there cannot be a doubt that the Council will open the professorships to the medical community, and confer the vacant offices on the most successful of the wranglers. But there is a wide difference between electing gentlemen in the slow succession arising from individual vacancies in the respective departments of an institution, and starting, at the very outset, with an entire body of unknown men, who, nevertheless, may have obtained their offices by concours. In the College of Surgeons the case is wholly different, and nothing can be more scandalous than the system of election in that establishment,—nothing more disgraceful than the absence of open competition in filling vacant seats in the Council. The charter neither stipulates nor interdicts, relative to the elections, further than by declaring that the Councillors are always to be selected from the commonalty. In conformity, therefore, with the liberal spirit of the charter, the Council were bound by their duty to the profession and the public, to select the best-informed men they could find among the members at large, and no proof of qualification could be presented equal to that which is derived from an exhibition in a concours. In neglecting such a fair and open trial for competitors, the Council have degraded the character of the institution; and, further, as the executive governors of a College of Surgeons, they have long forfeited every claim to the slightest share of the public confidence.

Instead of furnishing proof of the truth of his base and slanderous allegation against the Editor of this journal, Mr. Dermott has forwarded to us five folio pages of what he calls an "explanation." That part of his communication which refers to the accusa-

tion that was so distinctly made in his paper in the *Morning Advertiser*, we here insert *verbatim*:—

"But to the point at issue, I certainly did make use of the following words—'Besides, 'Dr. Plausable had now by these means (his 'conversaziones) extended and improved 'his connections vastly amongst the go- 'vernors of a neighbouring hospital, a va- 'cancy for a physician occurred and I need 'hardly state that his parties ensured him 'success. He now sends occasional letters 'to THE LANCET, which it is scarcely neces- 'sary to state are always inserted and "well 'displayed." For let me tell you, gentlemen, 'that it is very seldom indeed, unless under 'some most peculiar circumstances, that a 'persons "communication" is refused pro- 'vided he has *plenty of the essential heavy 'metal*.* This is a very weighty reason 'with *many* Editors; provided too the com- 'municant drives his carriage, keeps a good 'establishment and is *therefore* considered 'as a most respectable and influential mem- 'ber of society. In a just state of society,' &c."

"Looking at the paragraph, at what precedes it, and what follows, as reported in the *Morning Advertiser*, it will be seen, in the first place, that I was speaking of the evil tendency of money upon society in general—and stretch the signification as much as you please, you cannot therein show that I literally state that you have taken a bribe direct."

AS GEORGE DARBY DERMOTT has here made a clear and distinct confession of his guilt, we leave him to eschew the happy consequences of his own malignity and folly.

A word to the Editor of the *Morning Advertiser*. On the 20th of July last, the annual "Cartwright Dinner" was held at the Highbury-Barn Tavern, Islington, Mr. WAKLEY in the Chair. On the following morning a few sentences of a report of the proceedings at the dinner were published in the *Morning Advertiser*. It was therein stated, as a part of a speech made by Mr. WAKLEY, that he had said in his notice of the public press, "that the *Morning Adver-* "*tiser* newspaper had neither scope, space, "nor talent, to espouse the cause of the peo- "ple efficiently."

In another part of the paper there appeared an editorial comment, in which Mr. WAKLEY was called upon, under a threat, to explain whether he had or had not used these words. The threat was, of course, regarded by Mr. WAKLEY as an invocation to silence. Had there been no menace, he would most cheerfully have stated that he did not utter one word or syllable injurious to the character of the *Morning Advertiser*. On the contrary, he most distinctly and unequivocally declared that of all the morning papers the *Morning Advertiser* advocated, on the broadest and most liberal basis, the rights of the mass of the people. In fact, the editor of the *Advertiser* was imposed upon, on that occasion, by a tissue of infamous falsehoods. Mr. BARCLAY, late candidate for the representation of York, and other gentlemen, addressed letters to the *Advertiser*, showing the inaccuracy of the statements in the report, and the Editor of the *True Sun*, who was at the dinner, gave a report of the proceedings at variance with that which appeared in the *Morning Advertiser*; that gentleman even offered his own personal testimony in proof of the fallacy of the calumnious statement. But there was one person who wrote to the *Advertiser*, affirming the accuracy of the words which had, in the first instance, been attributed to Mr. WAKLEY. That person was GEORGE DARBY DERMOTT, whose feelings towards THE LANCET have, for some time past, been those of bitter enmity, from his entertaining an opinion that his labours, as an author and a draftsman, were slighted by that journal. This was the witness.

The editor of the *Morning Advertiser* ought now to be convinced that he acted very harshly, if not unjustly, towards Mr. WAKLEY on that occasion. But it is quite true that a reformer, or the conductor of a journal, who pursues his course honestly and independently, cannot, by any possibility, avoid false imputations; but, if he cannot maintain his course in utter defiance of falsehood and slander, the labours of such an individual can be of no use to the public.

* These words were printed in *italics* in the *Morning Advertiser*.—ED. L.

In publishing the letter from Mr. Rogers, which will be found at page 256 of the present number of The Lancet, giving an account of an inquest which has recently been held at Farnham, we should violate our own sense of justice and propriety, if we were to refrain from stating that Mr. Postello does not appear to have incurred the slightest degree of culpability in connection with the decease of the child. In short, there is not a tittle of evidence in proof that the child was poisoned. Certainly the powder which was administered on the *Sunday* morning, was not the cause of death by poisoning on the following *Thursday*, and was assuredly not that which was found in the stomach of the deceased at the *post-mortem* examination on the following day. Mr. Postello is entirely exonerated from blame, and it is an act of malicious cruelty to make him the object of suspicion or reproach on an occasion in which his conduct is wholly blameless.

Creosote is now enjoying in London the vogue which it possessed one or two years ago in Paris, and, at an earlier period than that, in Germany. The various experiments made with this new remedy, and the different opinions prevailing with regard to its medicinal powers, induced the Royal Academy of Medicine in Paris to appoint a commission of its members, with a view of examining the several memoirs addressed to the Academy on this subject, and of performing for themselves experiments with this highly extolled substance. These trials have been concluded, and in a report on the therapeutic properties of creosote, made by M. Martin Solon, on the 6th of October last, on behalf of the commission, it is stated that they do not at all confirm the character for success given to it by most of the authors who have written upon creosote. The commission, therefore, are inclined to believe, that its therapeutic powers have been very much overrated; but their investigations have led to the discovery of its use for the conservation of anatomical preparations. Thus a heart, a portion of epiploon, a portion of liver, and other preparations, were placed in a jar containing a weak solution of creosote, in order to test its quality in this respect. The jar remained in the amphitheatre of the *Hopital Beaujon*, from the month of August last until the presentation of the report, when the preparations were still in a state sufficiently good to give an exact idea of the organs themselves, and the lesions by which they were affected. The commission concludes by stating, "that creosote, a substance very remarkable in a chemical point of view, has a peculiar action on albumine, which it coagulates very quickly; that it has an exciting action on the economy, but is not more efficacious than other means which we already possess; and, finally, that, dissolved in water, it may serve for the preservation of anatomical preparations."

On the report being read, M. Andral junior remarked, that he had made numerous experiments with creosote, without obtaining satisfactory results. He said he had tried it in pulmonary phthisis, in cancer of the uterus, and in the various forms of leucorrhœa. In eighteen cases of pulmonary consumption, neither the cough, nor the diarrhœa, nor any other of the symptoms, was alleviated by its use. In cancer of the uterus, when used in the form of injection, it acted simply like any other astringent. M. Emery, in addition to this, said that he had employed this substance in various cutaneous affections, and generally with the effect of exasperating the disease. M. Velpeau also spoke on the subject, and stated that he had tried it two years ago as an external application to cancerous, scrofulous, and syphilitic ulcers. He observed that he regarded creosote as an excitant, and even as slightly caustic, but he considers the nitrates of silver, of mercury, and some other such substances, as much superior in remedial efficacy. Some of our medical brethren on this side of the channel, hold a very different faith from the general creed of the French commission.

DUPUYTREN'S MUSEUM.

This museum, which with much greater propriety might have borne the name of Orfila than that of the great surgeon whose bust is placed over the entrance, was thrown open to the public on the 2nd day of

this month. It occupies the small gothic church which was formerly attached to the old convent des Cordeliers, which, like so many other buildings in France, has passed from the service of the church to that of the state. It seems strange enough, as one of our contemporaries has observed, that visitors should enter a museum of anatomy through the door of a Catholic church, but anomalies of this kind are so frequent in France, that the *morale* of the circumstance does not seem to affect or disquiet even the most steady advocates of "the present order of things." In fact, we know not where a better study of a true creed could be found, than among such exquisite evidences of creation. Here, indeed, men have "reasons for the faith that is within them." We shall defer anything like a detailed description of this establishment, until a catalogue is published, and the presses are somewhat better garnished. The creation of a few months, "Dupuytren's Museum" is, of course, at present very incomplete. It contains, however, already, about 1500 preparations, which are labelled with care, and arranged in a manner well calculated to facilitate their study. The greater part of these have been removed from the museum of the Faculty, and are highly interesting, as numbers of them refer to the "Memoirs" of the old Academy of Surgery; the rest have been prepared by the young anatomists of the school. The establishment of the museum reflects the highest credit on the zeal and perseverance of M. Orfila, to whose exertions alone the medical public of Paris are indebted for an opportunity of studying the various morbid alterations to which the human body is subject, in the most complete manner. Should the zeal of the dean be seconded, even feebly, by the different hospital surgeons or physicians, the *Musée Dupuytren* may soon hope to rival or surpass any similar establishment in Europe.

HUFELAND'S ELIXIR.

Formula for a very efficacious Anti-catarrhal Elixir.—In the obstinate and frequently distressing cough which remains after the influenza, as well as in other chronic and catarrhal coughs, the celebrated German physician Hufeland has found the following mixture of the greatest benefit:—

R. *Extract. Card. Bened.* ʒj; *Dulcamar.* ℈j; *Aquæ Fœnic.* ʒj; *Lauroceras* ʒj. M. 60 drops four times a-day.

Under the influence of this mixture the cough diminishes in a few days and disappears. The author has also found it useful at the beginning of consumptive cough, supervening on common catarrh.

WESTMINSTER MEDICAL SOCIETY.

Saturday, Nov. 7th, 1835.

Dr. Addison in the Chair.

DEATH OF SIR D. BARRY.

Amongst other subjects which engaged the attention of the Society this evening was the death of Sir David Barry, whose name circumstances had combined of late years to bring frequently before the profession, and who was consequently pretty generally known as a metropolitan physician. The decease of this gentleman was announced by Dr. James Johnson, in the subsequent observations, which were followed by remarks from several members, occurring in the order in which we now proceed to report them.

Dr. Johnson said the death of Dr. Barry had occurred within the last few days in a sudden and seemingly-mysterious manner. His professional services were well known to the Society, and of them he need not speak, as were many of the qualities which would render his loss severely felt. The facility with which he communicated his ideas, the fertility of his imagination, the brilliancy of his wit, and the poignancy of his satire, were all equally remembered; though he might add, with regard to the latter, that whomsoever he wounded his good-nature was eager to heal. On Tuesday last, Sir David dined out in perfect health. After dinner he ate three pears and some nuts, and in the evening some cake, which he did not relish; afterwards he felt an uncomfortable weight about the chest. On the following day, on his way to the city, through the Haymarket, he was suddenly seized with excruciating pain in the stomach and loins, and faintness, and felt assured that he was dying. He (Dr. J.) was sent for, but being from home, his son attended, who found Sir David pale, chilly, and with the aspect of a person who had sustained a severe accident. Sir David was conveyed home, and at one p.m. on the same day he was visited by him (Dr. J.), when he was still chilly, though slight reaction had commenced. The pulse was not bad, and was beginning to be more developed. Sir David considered that his sufferings were entirely dependent on the presence of indigestible matter, and that this

would be removed by an emetic. He (Dr. J.) demurred to prescribe this, but Sir David urged its administration. He (Dr. J.) reasoned with his patient on the subject, pointing out that as the indigestible substance had been swallowed fifteen or sixteen hours since, without doubt it had passed the pyloric orifice of the stomach, and that an emetic would occasion considerable pain and inconvenience. He therefore wished to prescribe four grains of calomel, and one of opium. To this Sir David acceded, and he was directed to be kept warm in bed, and to have hot cloths applied to the stomach. At his next visit, two hours afterwards, he found his patient relieved, and more composed; his skin was warm and moist. A warm aperient was prescribed, and as it had not sufficiently operated at eight p.m., an enema was injected, which produced copious evacuations. Between the time of prescribing the aperient and administering the injection, Sir David felt better; his pulse had become better, and no symptom was present, indicating that his end was so near; nor did Dr. Copland, who saw him, consider his life to be in danger at half-past ten p.m.; he remained quiet until one p.m., when suddenly he expired, after getting out of bed. He was in the fifty-sixth year of his age. The post-mortem examination was performed on the following Friday evening by Mr. H. Johnson. On laying open the abdominal coverings, remarkable layers of fat were found between them and the peritoneum; the stomach and intestines were empty, and exhibited no traces of disease. On making an incision into the right side of the chest, an immense quantity of clear serum burst forth, but he (Dr. J.) was not a little astonished at finding the left side of the chest filled with water, and five pints of blood effused into the cavity of the chest, an aneurysm of the descending thoracic aorta being discovered, of the size of an orange, which had burst into the posterior mediastinum. The left ventricle of the heart was hypertrophied, and found to be upwards of an inch in thickness. On reflecting on the matter, now that Sir David's sufferings and the cause of his death were ascertained, he (Dr. J.) was extremely glad that he had insisted on the impropriety of using an emetic, for had it been taken, death must evidently have occurred during its action; and if an examination had not been permitted, it would have been extremely difficult to account satisfactorily for the fatal result.

Dr. Copland said that he had but little to add to these particulars. When he was sent for, he found Sir David still expressing a great desire for an emetic, but not considering one to be required he (Dr. C.) assisted in prevailing on him to wait until the consultation at eight p.m., when Dr. Johnson and Mr. M'Intyre would also be present. When he (Dr. C.) arrived, a few minutes after Sir David's death, he hesitated at first what step should be taken; but he found that the lips were perfectly blanched, and that it was impossible by pressure on the vessels of the neck to fill them with blood; the same phenomenon was present in the veins of the arms, indicating death from hemorrhage, therefore nothing was attempted at this period to be done in the way of treatment.

Mr. Streeter inquired of Dr. Johnson whether there was any valvular disease existing. (The answer was in the negative.) He was induced to ask the question, because his (Mr. S.'s) father had died from symptoms very similar to those affecting Sir David, and in his case valvular disease existed, and was recognizable during life. His father resided at Clapham, and retired to-bed one day as well as usual; presently after he was heard to fall on the floor; on being found and placed in bed, he could not articulate; the pulse of each wrist was different in its beat from that of its fellow. He (Mr. S.) arrived at seven p.m., at about four hours and a half from the attack; the power of utterance was still absent, but the patient was evidently conscious. At midnight he died suddenly, apparently while awaking from a quiet sleep. On the following day the body was examined, when no disease was discovered in the abdomen; but in the chest, one to two pounds weight of clotted blood was seen, and a large quantity of blood had made its way into the posterior mediastinum.

Mr. H. Johnson offered to describe the condition of Sir David when he first saw him. He found him sitting with his hand on the epigastrium, the seat of agonizing suffering. Sir David at once urgently requested that an emetic should be administered, but with this request he did not comply; an opinion against it also was maintained by his seniors on their attending, the impropriety of the step being also since sanctioned by the ascertained condition of the sufferer. He was then cold, the lips were blue, the pulse was small, the countenance portrayed intense anxiety and suffering, and Sir David felt convinced that he should die. The morbid appearances were those detailed by Dr. Johnson. He (Mr. J.) believed that aneurysm of the thoracic aorta was extremely difficult to detect, and that even the most elaborate medical inquirers had admitted that fact. Dr. Green, it was true, had, in an able article in the Dublin Journal, arrived at the conclusion that the morbid condition could be predicated, yet the indications amounted in his opinion to little more than a series of guessings. In rupture of the aorta into the pericardium, it was not generally considered that death must necessarily follow immediately after the accident, and in Sir David

Barry's case, several hours had elapsed between the accident and the termination of life.

Dr. CHOWNE said he was aware that Sir David Barry was impressed with the idea that he laboured under an affection of the heart. Was Sir David of the same opinion during the present attack?

Dr. JOHNSON replied that about four years ago Sir David called on him, and requested that he would examine his chest with the stethoscope, as he (Sir David) feared that his heart was affected; but at that time no disease could be detected, although it was not impossible that the hypertrophied condition of the right ventricle had already commenced. As Sir David was inclined to be stout, and one who might justly be termed a *bon-vivant*, though not irregular in his habits, he (Dr. J.) recommended him to live rather more abstemiously. The circumstances of the sudden death of a Dr. B.—— were recalled to his mind on the present occasion. The doctor was rather an invalid, and he (Dr. J.) called to see him in the evening, when he found him taking his wine. He (Dr. J.) sat with him for about half an hour, when, all at once, without any evident cause, Dr. B. complained of pain in the head and stomach, and turned pale. Presuming that the doctor was fainting, he administered some brandy and water, which presently revived him, but, shortly after, the pain returned in the stomach and back with increased intensity, and in a few hours after he died. At the examination, a considerable quantity of blood was found effused, from the rupture of an aneurysm, which no doubt burst when he (Dr. J.) was first sitting with him, and the faintness induced, arrested the hemorrhage, but at last the gush was too large to be thus checked, and death followed.

Mr. COSTELLO related the case of a young gentleman who was brought into the *Hotel Dieu*, under the care of Dupuytren; who had, while fencing, the point of a dagger thrust through the pericardium, which corroborated the opinion, and in great measure served to lay the dispute that had long existed, whether such injuries were fatal or not. Dupuytren maintained that they were not always followed immediately by death.

A few other remarks followed, and then the subject dropped. The other discussions of the evening, as well as those of some other societies, shall find a place in our next number.

THE *Medico Chirurgical Society* held its first meeting for the present session, on Tuesday evening last. A report of the proceedings shall be given in the next LANCET.

MEDICO-BOTANICAL SOCIETY.

Tuesday, November 10th, 1835.

EARL STANHOPE, President, in the Chair.

THIS being the first night of the session, on the President taking the Chair, an address of congratulation on his return to England after a long absence was read. His lordship, in returning thanks, assured the Society that he felt most anxious for its success, and that he should devote much of his time to promote its welfare, both from his love for botanical science, and from the great respect he felt for the medical profession.

Dr. SIGMOND then read an eulogium on the late Mr. Gilbert Burnett, which was ordered to be entered on the minutes of the Society.

Mr. JOHNSON read an address introductory to the opening of the session, pointing out the advantages which had resulted from the study of botany, by contrasting the present objects pursued in medical education with its state many years since.

A paper by M. GERMON was next read, on the application of the juice of the Manchineel tree in cancerous diseases. The remedy is to be brought into contact with the eschar alone; care being taken to prevent its absorption at the edges, from which the worst effects might follow. Its analogy to the action of arsenic induced M. G. to recommend the juice, and anticipate success from its employment.

LONDON MEDICAL SOCIETY.

OBSERVATIONS BY DR. RAMSBOTHAM, ON EXTRA-UTERINE FŒTATIONS, AND ON THE TERMINATIONS OF THE UTERINE VESSELS, IN CONNECTION WITH THE PLACENTA.

To the Editor of THE LANCET.

SIR,—As you have noticed in the last number of your journal some remarks I made at the *London Medical Society* on a case of extra-uterine conception, I shall feel obliged by your correcting the following trifling inaccuracies into which your reporter has fallen.

I stated,—not that there were only recorded five cases of extra-uterine fœtation,—but that I was only acquainted with five, reported in our language, in which an extra-uterine fœtus had been extracted by operation through the abdominal parietes; and that none of those cases had occurred in Britain. The earliest is given by Mr. Brodie,

of Nevis, W. I. (*Philosoph. Trans.* vol. 19, June 1697.) Mr. Bard of New York has furnished one. (*Med. Obs. and Enq.* vol. 2, March 1760.) So has Dr. Bell of Dublin. (*Med. Commentaries*, vol. 2, part 1, 1774); in which instance the gestation was twin; and both fœtuses were removed at the same time. We have another by Dr. M'Knight of New York. (*Mem. Med. Soc. Lond.* vol. 4); and a fifth by Mr. Baynham, Essex County Virginia. (*Med. Facts and Obs.* vol. 1, 1791.) I might have added a sixth, which at that time escaped my recollection. (*Philosoph. Trans.* vol. 41, 1741), in which a butcher, named O'Neil, in the County Tyrone, Ireland, extracted by incision a fœtus, whose elbow appeared through an ulcerated aperture in the abdominal parietes.

I mentioned also, as your reporter states, that I had personally known ten cases of extra-uterine conception, besides the one under consideration; but as he has made me affirm what could not possibly happen, you will allow me also to correct him here. Four of the patients died from rupture of the sac, as evidenced by dissection; three of these were tubal—the most frequent form of all the varieties,—and the other parietal, or as the French call it, "interstitial,"—in which the ovum is lodged within that portion of the fallopian tube which traverses the parietes of the uterus. Three women died during the process of ulceration, established for the purpose of getting rid of the putrid mass; and three have recovered,—two after the evacuation of the fœtal body, piecemeal, *per rectum*; and the last, who had the fœtus remaining within her when I last saw her (having conceived about 20 years ago), and who has, to my knowledge, borne three children since she became the subject of this irregular species of gestation.

In noticing my remarks also on Dr. Lee's description of the connection between the uterus and placenta, your reporter asks in a note, "Where does Dr. Lee state that the apertures [described in the uterine vessels in communication with the placenta] are at their extremities?" It is true that Dr. Lee does not use the word "extremities," but in his paper on the connection between the uterus and placenta, published in the *Philosophical Transactions*, and reprinted in his essay on some of the diseases of women, we read (p. 203), "The semilunar or valvular-like edges of the vessels at their *terminations* in the inner surface of the uterus, are admirably adapted to ensure the effects of arresting the current of blood," &c.; and in the letter from Mr. Owen, of the College of Surgeons, to him, which the doctor has inserted in that paper (and whose opinions we may therefore fairly conclude that he adopts) we find the following passages:—"In every instance, the vein, having reached the inner surface of the uterus, *terminated in an open mouth* on that aspect." "But with respect to the veins, they invariably presented the same appearances, *terminating* in open semicircular orifices, which are closed by the apposition of the deciduous membrane, and placenta." Again: "The preparation which accompanies this letter shows the *termination* of a vein on the inner surface of the uterus, and an artery of the decidua cut through, with the corresponding appearances on the surface of the placenta."

Dr. Nimmo's report, also embodied by Dr. Lee in his paper, is to the same effect. "These (uterine vessels), instead of passing directly into the placenta, are distinctly seen applying their *open mouths* to the membrane of the placenta;" and Dr. Lee himself states that "Mr. Broughton (after having re-examined the preparations on which Dr. Nimmo had previously made his observations) authorized him (Dr. Lee) to state to the *Royal Society* that Dr. Nimmo's account was perfectly correct."

I think, from these quotations, we may presume that Dr. Lee's opinion at the time they were published was, that the uterine vessels, in connection with the placenta, terminated by open extremities. I am, Sir, your obedient servant,

FRANCIS H. RAMSBOTHAM.

14, New Broad-street, Nov. 11, 1835.

COUNCILSHIP IN THE COLLEGE.

To the Editor of THE LANCET.

SIR,—Let Mr. Kingdon take all the benefit he desires from his "appeal" to the profession. "What's he to Hecuba, or Hecuba to him?" The Council of the College of Surgeons dishonestly exercise the power which they wield;—to share this power Mr. Kingdon aspires, and bases his claim on the same pretensions as have been advanced and acted upon by all successful candidates for the usurpation, and he now grumbles that he is denied the power of riding roughshod over his fellow members, and demands their sympathy that the power is refused him! The members of the College have not shown all the spirit which their declarations in 1826 justified us to expect; but they surely will not weep with Mr. Kingdon, he having sought for office by recognising the unworthy principle which excludes from the Council the very men whose support he now supplicates. Let this gentleman show cause for the inconsistency which thus marks his conduct. I am, Sir, yours respectfully,

A MEMBER OF THE COLLEGE.

London, Nov. 5, 1835.

MIDDLESEX HOSPITAL.

To the Editor of THE LANCET.

SIR,—Fully convinced that you are a zealous advocate for the correction and reform of all abuses in the medical profession, I shall feel obliged by your inserting in your valuable and independent periodical the subsequent remarks on a subject relative to the *Middlesex Hospital*.

On my first perambulation through the wards of that institution, I felt surprised at the small number, comparatively speaking, of students really belonging to the hospital. From what cause, thought I, can the fact emanate? Can it be for want of scientific practice or principles on the part of the attendant medical men? Certainly not. What then! The causes are to me sufficiently obvious: viz., a deficiency in cases, and an impossibility of witnessing operations. Mayhap, I shall render the latter point more intelligible by an illustration. I, accompanied by three other college students, went to the hospital, one day last week, with the view of witnessing an interesting operation (the excision of a very large inguinal tumour, which proved to be medullary sarcoma), and which was rendered more interesting from the hypothesis, that the femoral artery and vein permeated the tumour; but so far from seeing the operation, we could scarcely obtain a sight of the patient, that part of the theatre designed for the students having been previously occupied (with a very few exceptions) by unrecognised students,—*students totally unconnected with the hospital*. This, Sir, is one case out of *many*; but, why, I ask, are students first to be *seduced* to attend that hospital, and then to be deprived, nay, robbed (for it is nothing less), AND THAT WITH THE ASSENT OF THE MEDICAL AND SURGICAL STAFF, of a portion of the benefit supposed to accrue from their attendance, and for which privilege they have most amply remunerated the governors or functionaries of the institution? In conclusion, Sir, I can confidently assert, that, so long as the officers so blindly pursue their present course, so long will the number of students continue to decrease. I am, Sir, your obedient servant,

A MEDICAL STUDENT.

London, Oct. 26, 1835.

ST. BARTHOLOMEW'S HOSPITAL.

CONVALESCENCE FROM FEVER.—DEATH.—AUTOPSY.

MARY ANNE DOWLING, ætat. 24, but whose appearance rather indicated 40, was admitted into Mary's Ward, on the 2nd of July, under the care of Dr. LATHAM. On admission, her countenance was flushed, and the cuticular surface was dry, and increased in temperature; tongue white, but red at the tip and edges; pulse small and rather sharp, computing 108; bowels constricted; considerable emaciation; she complains of great oppression over the forehead and eyelids.

Her habits have altogether been intemperate. She has been indisposed for four weeks, commencing with a bilious attack, to which succeeded rigors, pains in all her limbs, severe pain in the epigastric region, with great prostration of the animal powers. She has been restricted to her bed, has had leeches applied over the stomach, and has taken medicines. Prescribed, now, castor oil directly, and three grains of hydrargyrum cum creta every six hours.

3. The night was passed sleeplessly; she complains of still more exhaustion: the cuticle is apparently peeling off; pulse very small, feeble, and numbers 120; tongue moist at the edges, the centre being completely covered with a dark brown fur. The bowels have dejected three times. Ordered to have six ounces of wine and strong broth. It is stated that if wine be not administered every hour, the patient must inevitably sink.

4. The night was passed without any sleep, but no delirium was noticed; her aspect and general appearance indicate yet more depression; the wine was increased to obviate absolute sinking; pulse 110, more feeble; teeth covered with sordes; tongue moist, though enveloped in a thin brown fur; three watery though fibrous evacuations were voided to-day. Let the head be shaved and a blister be applied, and let her have seven ounces of port wine.

5. Passed an exceedingly restless night. She presents the same languid and feeble appearance; pulse 104, with increased power; teeth covered with dark sordes; tongue white and moist. She turned from one side to the other this morning; bowels have excreted pretty freely; heat of skin somewhat diminished.

6. Tongue clean and quite moist; pulse 120, though very weak; requires wine, without which she appears to be quite lifeless; bowels not relieved to-day.

7. The *ensemble* augurs improvement; pulse 120, with augmented power. She was perfectly tranquil, without any delirium, during the night; tongue moist, with a fur in the centre; her condition continues to demand the steady and frequent repetition of wine. The bowels have evinced no action for two days. The pill to be omitted, and a dose of castor oil to be exhibited.

8. During the afternoon of yesterday she sank so low, that her pulse became imperceptible, her skin cold and dusky, and her tongue dry; in fact she appeared to be *in articulo mortis*. It was deemed imperative to administer four ounces of brandy, mixed

with water, in the short space of an hour, under which influence she rallied; her skin became warmer, her countenance was flushed, and she passed a favourable night. A solid and not unnatural evacuation has this day been passed; tongue rather dusky, inclining to brown in the centre; aspect not very propitious; pulse 120, feeble; no evident delirium. Ordered eight ounces of brandy and one grain of the sulphate of quinine every second hour.

9. There has been no very remarkable degeneration of vital energy since yesterday; aspect ameliorated; tongue moister and less furred; pulse still very feeble, amounting to 120; the same quantity of stimulus, resorted to at the same intervals, continues to be indispensable; the quinine has of necessity been omitted, after its third exhibition, in consequence of its producing a flushed countenance, and determination of blood to the head.

10. Has had little or no sleep; countenance dejected; three dark watery evacuations were voided during the night; the first of these was tinged with blood. She evinces to-day some tremour of the limbs; tongue moist; pulse 130, with decidedly less power; bears pressure over the whole abdomen without exciting pain. Brandy exhibited every hour to prevent dissolution; if wine be omitted longer than an hour, the tongue becomes dry.; apply a blister to the abdomen.

11. Aspect improved, though her countenance is flushed; had no sleep; blister rose well; stimuli administered every hour as before, to prevent sinking; pulse 120, still very feeble; tongue moist, furred, red at the tip and sides. Three watery stools were passed.

12. Passed a favourable night; aspect indicates an improvement; articulates with more power; teeth free from sordes; tongue moist, with a white fur, red at the tip and edges; bowels constricted; wine still persisted in; during the last four days she has taken a pint of wine and eight ounces of brandy in the space of twenty-four hours. Let her have a mixture consisting of twelve grains of the carbonate of ammonia and three ounces of camphor mixture; a tablespoonful to be taken every two hours.

15. Countenance more cheerful; rested better; pulse 120; bowels not relieved; perfect absence of pain in the head, chest, and abdomen: the wine and broth resorted to every hour; the brandy has been discontinued during the last twenty-four hours; the mixture was likewise rescinded after the second dose, on account of its exciting nausea.

14. Amendment progressive; stimuli protracted to much longer intervals; has had one fluid but healthy dejection; pulse very feeble, numbering 120.

15. Wine and broth persisted in as before; bowels confined; tongue covered with a white fur, but red at the tip and edges; pulse as in last report.

16. Complains this morning of severe pain in the abdomen, especially in the epigastric region; no alvine excretion; tongue unaltered, and there remains the same urgent necessity for stimuli. Five grains of rhubarb and one grain of calomel directly. A sinapism to the abdomen.

17. Immediate relief succeeded to the application of the sinapism; sustains pressure without pain; the powder produced one dark solid evacuation, anorexia; tongue still coated with white fur. Continue the wine as before.

18. Slept tranquilly; evinces a brighter and more intelligent aspect; the frequency of the circulation continues, with no augmentation of its power. Abdomen remains free from tenderness. Persist in the use of wine and broth.

Acute pain diffused through the right arm, which appears increased by pressure, and is unattended by any visible change in the condition of the limb; pulse stronger, from time to time, at different periods of the day.

19. Had a rigor in the night, which lasted for ten minutes, followed by great heat; bowels relieved; other symptoms unalleviated. She has since manifested at one time improvement; at another a deceived aggravation of all her symptoms. She has occasionally been up and walking about the ward, and then relapsing into the same depressed state; but under the influence of medical treatment in watching and ministering to her various symptoms as soon as they became evident, she continued to linger on, though spending a miserable existence, until the 12th of September, when death terminated her protracted sufferings.

Examination twenty-four hours post mortem.

The following phenomena were observed:—*Head.* Contents of the cranium quite healthy. *Thorax.* The pleuræ were adherent; no serum could be discovered in either cavity; the lungs contained an unusual quantity of serum, and their texture was large and easily torn. The posterior portion of the inferior lobe was greatly congested. A quantity of fat was observed at the base of the heart, and about the origin of the larger vessels. Two ounces of straw-coloured fluid were detected in the bag of the pericardium. —*Abdomen.* The peritoneum was perfectly natural. The mucous membrane of the stomach was red with blood, but no ecchymosis was discerned. The small opening of the stomach was contracted. The duodenum was deeply injected; there were some circumscribed patches of vascularity in the small intestines, but not a vestige of ulceration nor any enlargement of any of the mucous glands was to be discovered. The inferior portion of the small intestines was of

a deep-red colour; the cæcum and the commencement of the colon were of the colour of soot, dependent solely on the mucous membrane, which appearance was entirely removed on the separation of that tissue. The liver was mottled, and easily lacerated; the remaining viscera evidenced not the slightest appearance of diseased action having at any time disturbed their function.

Fibro-albuminous Tumour of the Back.—Operation.—James Jackson, ætat. 55, was admitted under the care of Mr. Earle, on the 10th of September, with a tumour which had existed about fourteen months, and occupied the hollow of the venter of the left scapula, projecting about two inches beyond its base towards the spine, where it exhibited itself in the form of a deep rounded swelling. He complained of an uneasiness from its existence, though the actual pain which he suffered was but trifling. He could draw his arm forwards on the chest, and backwards towards the spine, without difficulty, and he possessed the entire power of rotation of the arm in its socket. Repeated applications of leeches had been employed, with cold lotions and purges, but as no benefit resulted from this treatment, it was deemed requisite by Mr. Earle and his colleagues to remove the disease by operation. Accordingly on the 3rd of October he was conveyed into the theatre and secured on the table, when Mr. Earle commenced the excision of the diseased part, by an incision about seven inches in length, along the base of the scapula, which exposed the insertions of the muscles into that portion of the bone. These were then divided along the line of the first incision, and the tumour exposed. It extended forwards below the blade-bone and the ribs. The operator then dissected round it, beginning on the surface which confronted the ribs, in which part it was found to have advanced very considerably, and it was separated only with great difficulty from the scapula, partly by the scalpel, and in part by the finger. The difficulty which existed in this part of the operation, originated from the circumstance that very close contact subsisted between the tumour and the bone, which at one part was denuded of its periosteum and rough. On the removal of the tumour a very considerable cavity was exposed to view, the walls of which exhibited the appearance of a large, thickened, whitish cyst. The wound was slightly dressed, and slight pressure was employed on the scapula. The tumour was afterwards examined in the library, and its nature determined by Mr. Kiernan to be *fibro-albuminous*. The case is doing well.

NORTH LONDON HOSPITAL.

Concussion of the Brain.—Fracture of the Neck of the Scapula.—James Ricketts, aged 44, was admitted, Oct. 2, under the care of Mr. Cooper, in consequence of a fall while painting the roof of a lofty room. The pupils were dilated, his pulse was slow, and he was affected with sickness and vomiting. After a copious bleeding his pulse rose. On being brought to the hospital he was partially insensible, but could be roused by questions put to him in a loud tone of voice. The iris acted on exposure to light. Pulse 120. The head was kept in an elevated position, and a cold spirituous lotion was applied to the scalp; his bowels were opened with calomel and croton oil, followed by a mixture containing the liquor ammonia acetatis, sulphate of magnesia, and antimony wine. On examination the neck of the scapula was found to be fractured,—a kind of injury, Mr. Cooper remarked, which was very easily detected through the medium of the coracoid process. The arm was put up with a wedge-shaped cushion in the axilla, the elbow being at the same time well supported in a sling. This case went on very favourably; the patient recovered the full power of moving his tongue, and left the hospital at his own request. Mr. Cooper remarked that a fracture of the neck of the scapula generally occurs through the notch in its superior costa. The case he considered to be an interesting one, because it was attended with some symptoms resembling those of dislocation of the humerus downwards. The arm sinks, the shoulder drops, the deltoid is flattened, and the elbow lowered. But the humerus can be readily raised again, which is not the case in a dislocation. The elbow is not drawn away from the side, as in a dislocation, and the humerus, after being raised, falls again on being left to itself. The crepitus can be distinctly felt on lifting up the shoulder, and applying the fingers to the coracoid process.

Removal of a Scirrhous Tumour from the Breast.—Ann Price, a married woman, aged 36, was admitted, Oct. 22nd, under the care of Mr. Cooper, with a tumour situated below the left mammary gland, and towards the edge of the pectoral muscle. It began to form six or seven years ago, when of course her age was not more than 29. As she suffered a good deal of lancinating pain in the swelling, which had long resisted iodine, and the other medicines usually prescribed in cases of chronic mammary tumour, Mr. Cooper recommended the patient to have the part taken away with the knife. Accordingly, on the 24th she

was brought into the operating theatre, when Mr. Cooper, assisted by Mr. Quain, made two semicircular incisions through the integuments, in a direction downwards and inwards, one on each side of the diseased mass, beginning with the lower one. He then detached the tumour from the surrounding connections, and removed it from the surface of the pectoral muscle, by cutting from the axilla towards the sternum. Three or four strokes of the scalpel readily accomplished this separation. Two arteries having been secured, the wound was closed with adhesive plaster, and a piece of linen was put round the chest. The arm to be kept quiet in a sling. In some clinical observations on this case, Mr. Cooper observed that the tumour had every appearance of being a true scirrhus, though the patient was only 36 years of age. The fibrous septa between the light-coloured semi-transparent scirrhous matter, could be seen with the naked eye. This opinion was also corroborated by the sharp, pricking lancinating pain which was almost continually experienced in the part for some considerable time before its removal. In this woman, however, menstruation had not ceased. In the axilla there is a small indurated gland, not much larger than a pea, which Mr. C. proposes to remove if the woman will consent to it. It is at present quite indolent, and has never given any pain. In removing diseased breasts and tumours of this part, Mr. Cooper recommended the incisions to be made in the direction of the fibres of the pectoral muscle. The lower incisions, he said, should be made first, because, otherwise, the bleeding from the upper cut would obscure the parts below. The tumour should then be detached from its connections all round, and finally dissected from its subjacent connections, beginning from the angle of the wound which is towards the axilla, and proceeding downwards and forwards. The chief bleeding is always from branches of the thoracic arteries on the external side of the wound. Sutures are for the most part unnecessary. Mr. Cooper thinks them disadvantageous, from becoming a source of irritation, and sometimes an exciting cause of erysipelas. No operations, he added, were more frequently followed by secondary hemorrhage, than those of amputation of the breast and removal of the testicle. When a breast of some magnitude has been removed, he recommends the application of a compress over it, with a broad piece of linen passed round the chest, capable of being laced tight with packthread, in the event of hemorrhage. Thus the bleeding may be readily commanded, as he knew, he said, from experience.

Sirs H. Halford and Benjamin Brodie failed to obtain for their diligent friend Roderick, the vacant professorship of Materia Medica, at *King's College*, Strand. The medical department of the institution was in a declining state, and it was considered that, for once, private interests must give place to the public credit of the establishment. Dr. Paris, therefore, on the score of his well-advertised name, was solicited to accept the chair, but the old gentleman coquetted so long on the occasion, that at length Dr. Webster, a physician to one of the metropolitan dispensaries, was applied to, and that gentleman is now delivering the winter course of lectures on Materia Medica in the College, and, we hear, with great satisfaction to the class, which, however, was not, in point of numbers, so tempting as to induce Dr. Paris to accede at once to the proposition of the Council. We believe that Dr. Webster will fulfil the duties of the office with diligence. He is a conscientious man, and will unquestionably do his best to instruct the pupils. Moreover, another change would yet more depress the fame of the College, and will be avoided, if possible. It is whispered, that in addition to other fancies and reasons, Dr. Paris did not relish coming *after Dr. Hawkins*.

Solid Nauseous Medicines.—*To the Editor.*—Sir,—Perhaps you will, through the medium of your widely-circulated and invaluable columns, make known to the profession an easy method of administering electuaries, or any species of nauseous medicine, when in a solid state. It is by taking a piece of confectioner's wafer, softening it by immersion in water, and enclosing the medicine therein. By this means the taste cannot be offended by the most unpalatable compound. I first observed the practice on the continent, and have since named it to one or two practitioners, who have adopted it with much benefit to the patient. The knowledge of this method, however, is at present confined to but few. I am, Sir, your most obedient servant, V. Daniels.

Brompton, Nov. 4th, 1835.

CORRESPONDENTS.

A Letter has been forwarded to us for publication, containing the signatures of a number of gentlemen who state that they are the pupils of Mr. Dermott. As the document is without either date or address, it may be a fabrication. If it be not, we may state that although we respect the motives and zeal of the subscribers, those gentlemen can scarcely expect that we should allow an odious accusation against

THE LANCET to be made the foundation of bestowing an eulogy on the calumniator in the columns of the slandered work.

We never undertake to preserve papers. Articles not inserted are destroyed.

The letter of *Humanitas* on medical attendance in the North Aylesford Union, shall appear next week.

The note of *G. M.*, if published in its present form, would be no voucher for the fact which the writer states. Our remarks, as he will perceive, applied to the hospitals. As the fact stated by *G. M.* is one of some historical importance, it certainly ought to be announced under the authority of the *name* of the lecturer. Shall the name and address be attached?

A report of *Mr. Ellis's* "reform" lecture has reached us, but not in time for publication this week. A commentary on the report, or the report itself, shall appear in the next LANCET.

An able professional Correspondent residing in the country says (and we here very willingly make the extract from his letter), "I have a son, a very fine honourable fellow, who is well able to fill a situation as dispenser to a surgeon. Can you put me in the way of obtaining a suitable and comfortable situation for him?" The address of our correspondent may be obtained at the Office.

L. The lectures of Mr. Preston have nothing to do with medicine.

The communications of *Mr. Cheyne* and *Mr. Edmonds* will be inserted,—the latter as soon as space will allow. The requests relating to it shall neither of them be forgotten.

A Medical Student. The indentures mentioned would not be received. Proof of execution of proper indentures would, in case of their loss, be received.

If *A Subscriber* will *read* the original remarks, he will find that they defend a principle of high professional importance. Common justice required that the rest should not, under the circumstances, be rejected.

ERRATUM.—We forgot to point out to the notice of a correspondent, that the words "plombite of *lime*," in one of Orfila's receipts for dying the hair, were a misprint for "plombite of *lead*."

METEOROLOGICAL REPORT.

(*Extract from a Meteorological Journal kept at High Wycombe.*

Lat. 51° 37′ 44″ North, Long. 34° 45″ West.)

Days.	Thermometer.		Barometer.		Rain.		Wind.	Weather.
	Highest.	Lowest.	Highest.	Lowest.	Ins.	Dcls.		
Nov. 2	46.	41.	29.96	29.88	0.4		E.	Day fine; rain evening & night.
3	42.	36.50	.81	.78	0.175		S.	Frequent rain during the day.
4	38.75	34.25	.79	.75	—		E.	Dull and heavy, but no rain.
5	38.75	25.25	.71	.66	—		E.	Dull without rain.
6	42.75	26.50	.72	.64	—		N.	Morning foggy, afterwards fine.
7	44.50	31.	.74	.64	0.3		S.	Rained freely during the day.
8	46.25	35.50	.77	.69	—		N.W.	A fine seasonable day.

Observations for October.

Thermometer....Highest .... 61.25 .. the 6th.
Lowest .... 28. .. the 18th, 19th, 21st, 27th, and 29th.
Mean ..... 43.98588.
Barometer .....Highest .... 30.13 .. the 16th.
Lowest .... 28.63 .. the 10th.
Mean ..... 29.49924.

Number of days of rain, 18. Quantity of rain in inches and decimals, 6.06875.

Winds.—6 East; 3 West; 3 North; 5 South; 1 North-east; 1 South-east; 6 South-west; 6 North-west.

So cold and wet an October has not occurred since 1823, and the rain exceeded what fell in Oct. 1823. Indeed so much rain has only once, viz. in July 1834, fallen in any one month during the last twelve years and a half.—The maximum of the thermometer was upwards of ten degrees below that of last October. The barometer was lower than since October 1824, as regards the mean; but the minimum was exactly the same as in the like months of the years 1824 and 1825. A few days were fine for the season, but the number of fine days was much less than the average.

Nov. 9, 1835.

W. JACKSON.